

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS FILE ☒ X WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

DATE FILED 10-24-84
LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-47876 INDIAN
DRILLING APPROVED: 10-31-84 - OIL (Exception Location)
SPUDDED IN: 11-4-84
COMPLETED: 11-21-85 PUT TO PRODUCING:
INITIAL PRODUCTION: 763 BOPD, 549 MCF
GRAVITY A.P.I. 40.8
GOR: 700
PRODUCING ZONES: 5735-5870 Upper Moray
TOTAL DEPTH: 6119
WELL ELEVATION: 5340 RB
DATE ABANDONED:
FIELD: UNDESIGNATED Cave Canyon 4-87
UNIT:
COUNTY: SAN JUAN
WELL NO. CAVE CANYON #3-1 API #43-037-31095
LOCATION 2140' FNL FT. FROM (N) (S) LINE, 200' FWL FT. FROM (E) (W) LINE, SW NW 1/4 - 1/4 SEC.

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				38S	24E	3	RAYMOND T. DUNCAN

Permitco

A Petroleum Permitting Company

RECEIVED

OCT 24

DIVISION OF OIL
GAS & MINING

October 22, 1984

State of Utah
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Raymond T. Duncan
Cave Canyon #3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

Gentlemen:

Raymond T. Duncan proposes to drill a well at the above mentioned location.

We realize that this location is a non-standard location in accordance with the spacing rules of the State of Utah. This location was picked due to topography and extensive seismic work which was done in the immediate area.

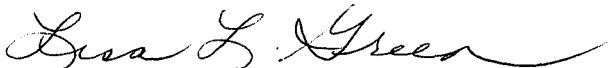
Raymond T. Duncan is the lease holder of the following:

T38S - R24E: Sec. 3: All
 Sec. 4: All

Therefore, no other lease holders will be affected by the drilling of the above proposed well. We, therefore, request your permission to drill this well at a non-standard location.

Sincerely,

PERMITCO



Lisa L. Green

Consultant for Raymond T. Duncan

cc: Raymond T. Duncan

Form OGC-1a

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

(Other instructions on reverse side)

CONFIDENTIAL

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. Type of Well
Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone ☐

2. Name of Operator
Raymond T. Duncan 303/759-3303

3. Address of Operator
1777 S. Harrison St., Penthouse 1 Denver, CO 80210

4. Location of Well (Report location clearly and in accordance with any State requirements.)
At surface 2140' FNL and 200' FWL
At proposed prod. zone

5. Lease Designation and Serial No.
U-47876

6. If Indian, Allottee or Tribe Name
N/A

7. Unit Agreement Name
N/A

8. Farm or Lease Name
Cave Canyon

9. Well No.
#3-1

10. Field and Pool, or Wildcat
Wildcat Undesignated

11. Sec., T., R., M., or Bk. and Survey or Area
Sec. 3, T38S - R24E

12. County or Parrish 13. State
SAN JOAN COUNTY

14. Distance in miles and direction from nearest town or post office*
12.5 miles northwest of Hatch Trading Post

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)
200

16. No. of acres in lease
1289.44

17. No. of acres assigned to this well
40

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.
2000'

19. Proposed depth
6100'

20. Rotary or cable tools
Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
5330'

22. Approx. date work will start*
November 1, 1984

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	8-5/8"	24#	2500'	1100 sx. or suffic. to circ. to sur
7-7/8"	5-1/2"	15.5#	6100'	400 sx or suffic. to cover zones of interest.

Raymond T. Duncan proposes to drill a well to 6100' to test the Ismay and Upper Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

***Please do not release any of the attached information to any party outside of the Division of Oil, Gas and Mining. Thank You.

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OCT 24

DIVISION OF OIL
GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed Lisa H. Green Consultant for Raymond T. Duncan Title Raymond T. Duncan Date 10/22/84

(This space for Federal or State office use)

Permit No.

Approved by.....
Conditions of approval, if any:

Title.....

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**

DATE: 10/31/84
BY: John R. Buge

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

CAVE CANYON #3-1
2140 FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

Prepared For:

RAYMOND T. DUNCAN

By:

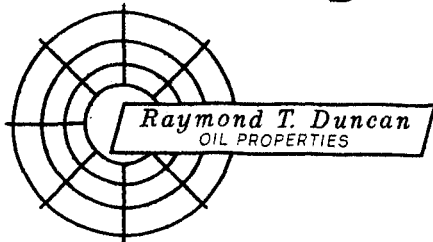
PERMITCO
1020-15th Street, Suite 22-E
Denver, Colorado 80202

Copies Sent To:

- 4 - BLM - Moab, Utah
- 1 - BLM - Monticello, Utah
- 1 - Div. of Oil, Gas & Mining - SLC, Utah
- 3 - Raymond T. Duncan - Denver, Colorado

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A Petroleum Permitting Company



1777 SOUTH HARRISON STREET · PENTHOUSE ONE
TELEPHONE (303) 759-3303 · DENVER, COLORADO 80210

October 12, 1984

Bureau of Land Management
Oil and Gas Office
136 E. South Temple
Salt Lake City, UT 84111

ATTN: Edgar Guynn

RE: Cave Canyon Federal 3-1
SW NW 3-38S-24E
San Juan Co., UT

Dear Sir:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of Raymond T. Duncan when necessary for filing county, state, and federal permits including Onshore Order No. 1, Right-of-Way applications, etc., for the above-captioned well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production, or compliance with regulations.

Raymond T. Duncan agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-captioned well.

Very truly yours,
RAYMOND T. DUNCAN

W. S. Fallin

W.S. Fallin
Production Manager

c1

ONSHORE ORDER NO.
Raymond T. Duncan
Cave Canyon 3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

1. The surface formation and estimated formation tops to be encountered are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Morrison	Surface	
DeChelly	1540'	+3800'
Hermosa	4640'	+ 700'
Ismay	5690'	- 350'
Lower Ismay	5870'	- 530'
Gothic Shale	5925'	- 585'
Desert Creek	5950'	- 610'
Lower Desert Creek	6015'	- 675'
Chimney Rock Shale	6040'	- 700'
T.D.	6100'	

2. The estimated depths at which oil, gas, water or other mineral bearing zones are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Anticipated Depth</u>
Gas & Oil	Ismay	5690'
Gas & Oil	Lower Desert Creek	6015'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

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ONSHORE ORDER NO.
Raymond T. Duncan
Cave Canyon 3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM

Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. a. Casing

The proposed casing program is as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Wt.</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Conductor	0-110'	17-1/2"	13-3/8"	48#	K-55	ST&C	New
Surface	0-2500'	12-1/4"	8-5/8"	24#	K-55	ST&C	New
Produc.	0-6100'	7-7/8"	5-1/2"	15.5#	K-55	ST&C	New

b. Cement

The cementing program will be as follows:

<u>Conductor</u>	<u>Type and Amount</u>
0-110'	Circulated to surface

<u>Surface</u>	<u>Type and Amount</u>
0-2500'	1100 sx Class B w/additives; or sufficient to circulate to surface.

<u>Production</u>	<u>Type and Amount</u>
	400 sx Class B with additives; or sufficient to cover zones of interest.

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ONSHORE ORDER NO.
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CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM

c. Auxiliary Equipment will be as follows:

1. Kelly cock.
2. Float above the bit.
3. A sub with a full opening valve will be on the floor when the kelly is not in use.
4. Monitoring of the system will be done visually.

5. Drilling fluid will be as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-4000'	Natural	9.0-9.2	35	10-20	
4000-T.D.	Chem Gel	9.5-12.0	45	5-10 through pays	

6. Coring, logging and testing programs are as follows:

- a. No cores are anticipated.
- b. The logging program will consist of the following:
Dual Induction 2500'-T.D.
BHC Acoustic & BHC Density/CNL 4400'-T.D.
Dipmeter (optional) 5600'-T.D.
- c. Drill Stem Tests will be run in the Ismay and Desert Creek formations.

Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later than 15 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.

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ONSHORE ORDER NO. 1
Raymond T. Duncan
Cave Canyon 3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM

7. Abnormal conditions, bottom hole pressures and potential hazards.
- a. The maximum bottom hole pressure to be expected is 3500 psi.
 - b. Raymond T. Duncan plans to spud the Cave Canyon Federal #3-1 on November 1, 1984 and intends to complete the well within approximately one month after the well has reached T.D.
 - c. The operator will contact the San Juan Resource Area at 801/587-2201, 48 hours prior to beginning any dirt work on this location.
 - d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.
 - e. The spud date will be reported orally to the San Juan Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5) will be sent within 24 hours of spudding, reporting the spud date and time. The Sundry will be sent to the District Manager.
 - f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the Moab BLM District Office, P. O. Box 970, Moab, Utah 84532.
 - g. If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig.

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ONSHORE ORDER NO. 1
Raymond T. Duncan
Cave Canyon 3-1
2140' FNL and 200' FWL
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CONFIDENTIAL - TIGHT HOLE

DRILLING PROGRAM

- h. If the well is successfully completed for production, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, no later than the first business day following the date on which the well is placed on production.
- i. No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Manager. A "Subsequent Report of Abandonment" (Form 3160-5), will be filed with the District Manager, within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.
- j. Final abandonment will not be approved until surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager or his representative, or the appropriate Surface Managing Agency.
- k. A first production conference will be scheduled within 15 days after receipt of the first production notice. The operator will schedule the conference with the San Juan Area Manager.

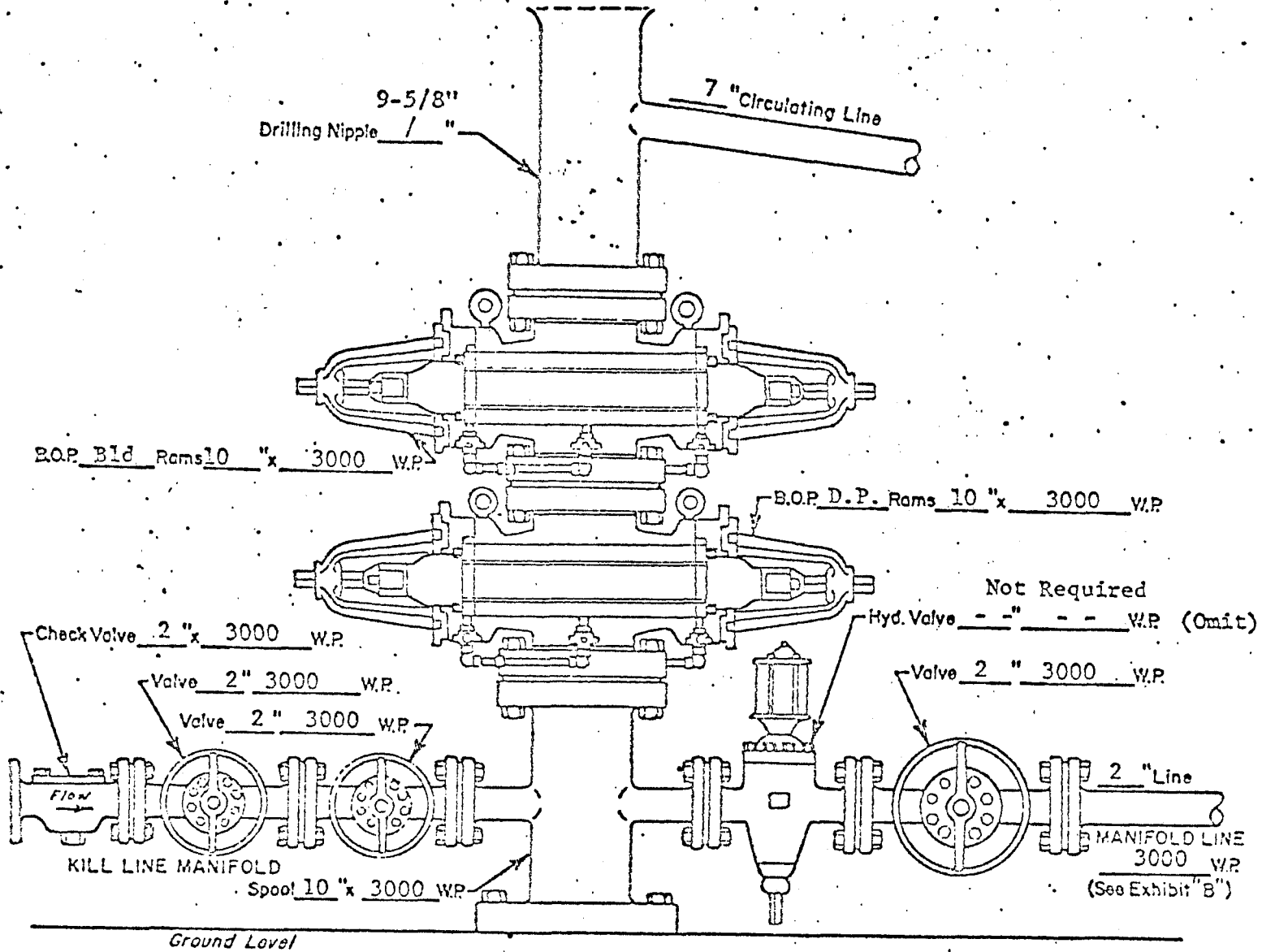
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COLEMAN DRILLING CO.

WELL NAME: _____

LOCATION : _____



WELL HEAD B.O.P.
3000 W.P.

☒ Hydraulic

ONSHORE ORDER NO. 1
Raymond T. Duncan
Cave Canyon 3-2
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

1. Existing Roads

- a. The proposed well site is located 12.5 miles from Hatch Trading Post.
- b. Directions to the location from Hatch Trading Post are as follows:

Go north and west on the Perkins Road #206 for 9.2 miles to the intersection of the Montezuma Creek Road. Continue west on the Perkins Road #206 for 2.7 miles. Turn north onto existing lease road and proceed northerly 0.6 miles. Turn south (left) onto flagged access and proceed approximately 1800' to the location.

- c. For location of access roads within a 2-Mile radius, see Maps #1 and #2.
- d. Improvement to the existing access will not be necessary and will be limited to the total existing disturbed width. The maximum total disturbed width will be 26 feet.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.

2. Planned Access Roads

- a. The maximum total disturbed width will be 26 feet. The running surface will be approximately 20 feet wide.
- b. The maximum grade will be 8%.

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ONSHORE ORDER NO. 1
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CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

2. Planned Access Roads (cont.)

- c. No turnouts are planned.
- d. The access road was centerline flagged at the time of staking.
- e. Drainage will be installed as deemed necessary by the dirt contractor.
- f. No gates, cattleguards or fence cuts will be necessary.
- g. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- h. The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drilling rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.
- i. Two 18" culverts will be installed along the new access route.
- j. Surfacing material will not be placed on the access road or location without prior BLM approval.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #3).

- a. Water Wells - one artesian spring
- b. Injection or disposal wells - none
- c. Producing Wells - none
- d. Drilling Wells - The Wells Federal #1 is currently being completed by Raymond T. Duncan.

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ONSHORE ORDER NO. 3
Raymond T. Duncan
Cave Canyon 3-2
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be a neutral color that will blend in with the environment.
- b. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.
- c. Tank batteries will be placed as shown on Diagram #1.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
- i. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

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CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

4. Location of Existing and/or Proposed Facilities (cont.)

- j. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Moab District Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from the Bonnie Dalton Artesian Well which is located in the NE/4 Sec. 1, T38S - R24E. Directions to the water source are shown on Map #2.
- b. Water will be trucked to location over the roads marked on Map #2.
- c. No water well is to be drilled on this lease.
- d. Use of water for this operation will be approved by obtaining a temporary use permit from the Utah State Engineer, 801/637-1303, and by receiving permission from the land owner of surface management agency to use the land containing the water source.

6. Source of Construction Material

- a. Road surfacing and pad construction material will be obtained from a commercial source.
- b. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.

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CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

7. Methods of Handling Waste Disposal

- a. The reserve pit will not be lined. At least half of the capacity will be in cut.
- b. Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.
- c. A trash pit will be constructed near the mud tanks and dug at least six feet into solid, undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.
- d. Produced waste water will be confined to a unlined pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance, and will be grounds for issuing a shut-in order.

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. See Diagram #2 for rig layout. See Diagram #3 for cross section of drill pad. See Diagram #4 for cuts and fills.
- b. The location of mud tanks; reserve, burn and trash pits; pipe racks; living facilities and soil stockpiles will be shown on Diagram #2 and #4. The location will be laid out and constructed as discussed during the predrill conference.

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ONSHORE ORDER NO. 1
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Cave Canyon 3-2
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CONFIDENTIAL - TIGHT HOLE

SURFACE USE PLAN

9. Wellsite Layout (cont.)

- c. The top 12 inches of soil material will be removed from the location and stockpiled separate from the trees on the southwest side. Topsoil along the access will be reserved in place.
- d. Access to the well pad will be from the north.

10. Reclamation

- a. Immediately upon completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator or his contractor will contact the San Juan Resource Area office in Monticello, Utah (801/587-2201) 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12 inches deep with the contour.
- f. Water bars will be built as follows to control erosion.

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 Feet
2-4%	Every 100 Feet
4-5%	Every 75 Feet
5+%	Every 50 Feet

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SURFACE USE PLAN

10. Plans for Reclamation of Surface (cont.)

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

2 lbs/acre Curlygrass (*Hilaria Jamesil*)
2 lbs/acre Western Wheatgrass (*Agropyron Smithii*)
1 lbs/acre Fourwing Saltbush (*Atriplex Canescens*)
1 lbs/acre Desert Bitterbush (*Purshia Gladulosa*)
1/4 lb./acre Yellow Sweetclover

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.

- i. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

11. a. Surface Ownership

Federal

b. Mineral Ownership

Federal

12. Other Information

- a. There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.
- b. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

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SURFACE USE PLAN

12. Other Information (cont.)

- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator that they are subject to prosecution for disturbing archeological sites or picking up artifacts. Salvage or excavation of identified archeological sites will be done by a BLM approved archeologist only if damage occurs.
- e. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- f. An archeological study will be done by LaPlata Archaeological Consultants. This report will be submitted directly to the appropriate agencies by LaPlata Archaeological Consultants.
- g. A Deer Winter Range Stipulation is in effect on this lease. There will be no drilling operations between December 1st and March 31st, unless otherwise authorized by the District Manager.

13. Lessee's or Operator's Representative and Certification

Permit Matters

Permitco
Lisa L. Green
1020-15th Street
Suite 22-E
Denver, Co. 80202
303/595-4051

Drilling & Completion Matters

Raymond T. Duncan
1777 S. Harrison
Penthouse 1
Denver, CO 80210
Steve Fallin
303/759-3303 (W)
303/770-0705 (H)

Permitco

A Petroleum Permitting Company

ONSHORE ORDER NO.
Raymond T. Duncan
Cave Canyon 3-2
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

CONFIDENTIAL - TIGHT HOLE

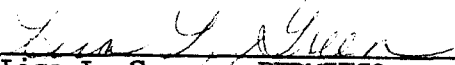
SURFACE USE PLAN

13. Lessee's or Operator's Certification (cont.)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Raymond T. Duncan and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

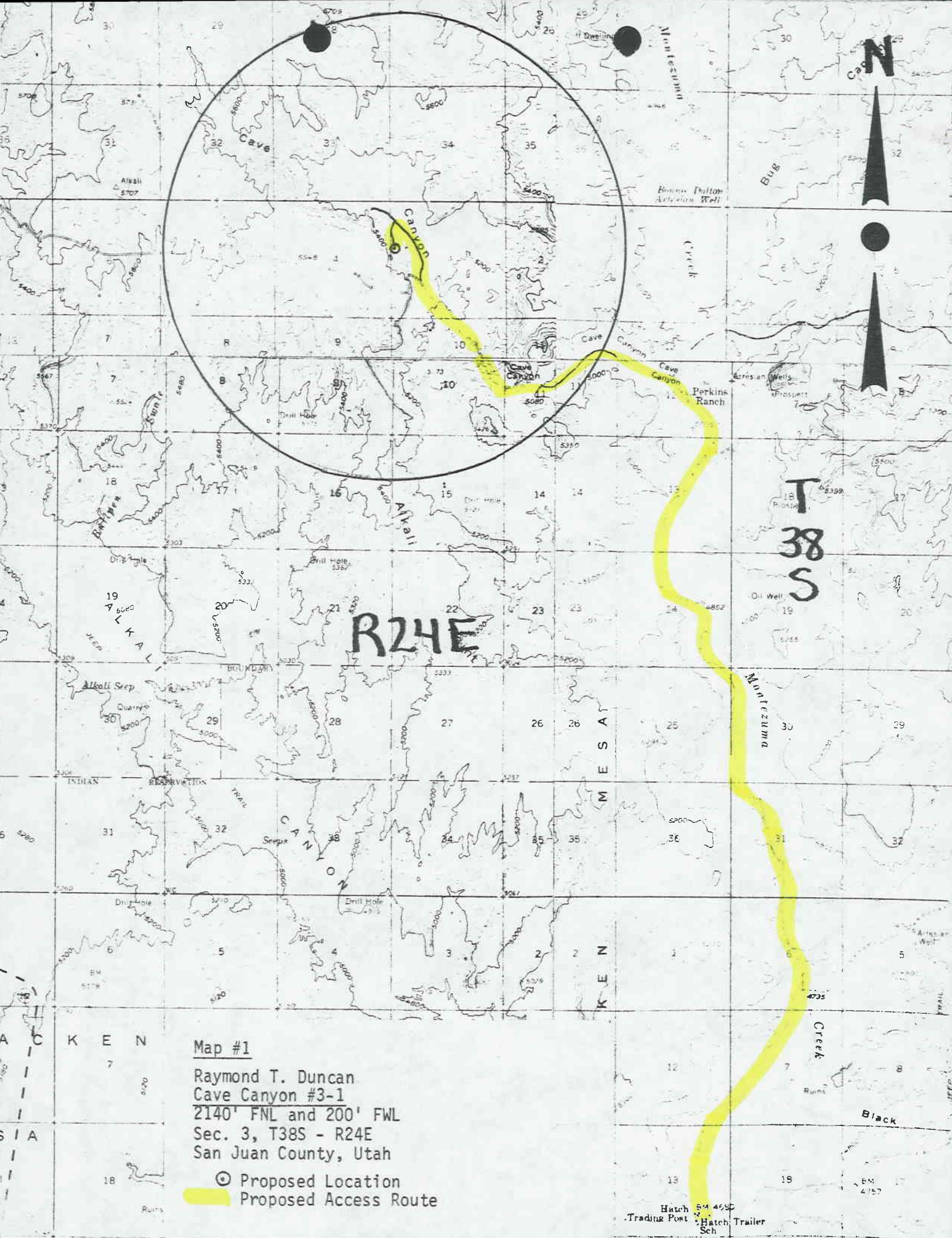
October 22, 1984
Date: _____



Lisa L. Green - PERMITCO
Authorized Agent for:
RAYMOND T. DUNCAN

Permitco

A Petroleum Permitting Company



R24E

T
38
S

Map #1

Raymond T. Duncan
Cave Canyon #3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

- ⊙ Proposed Location
- Proposed Access Route

Hatch Sch 4157
Trading Post
Hatch Sch 4157
Trailer



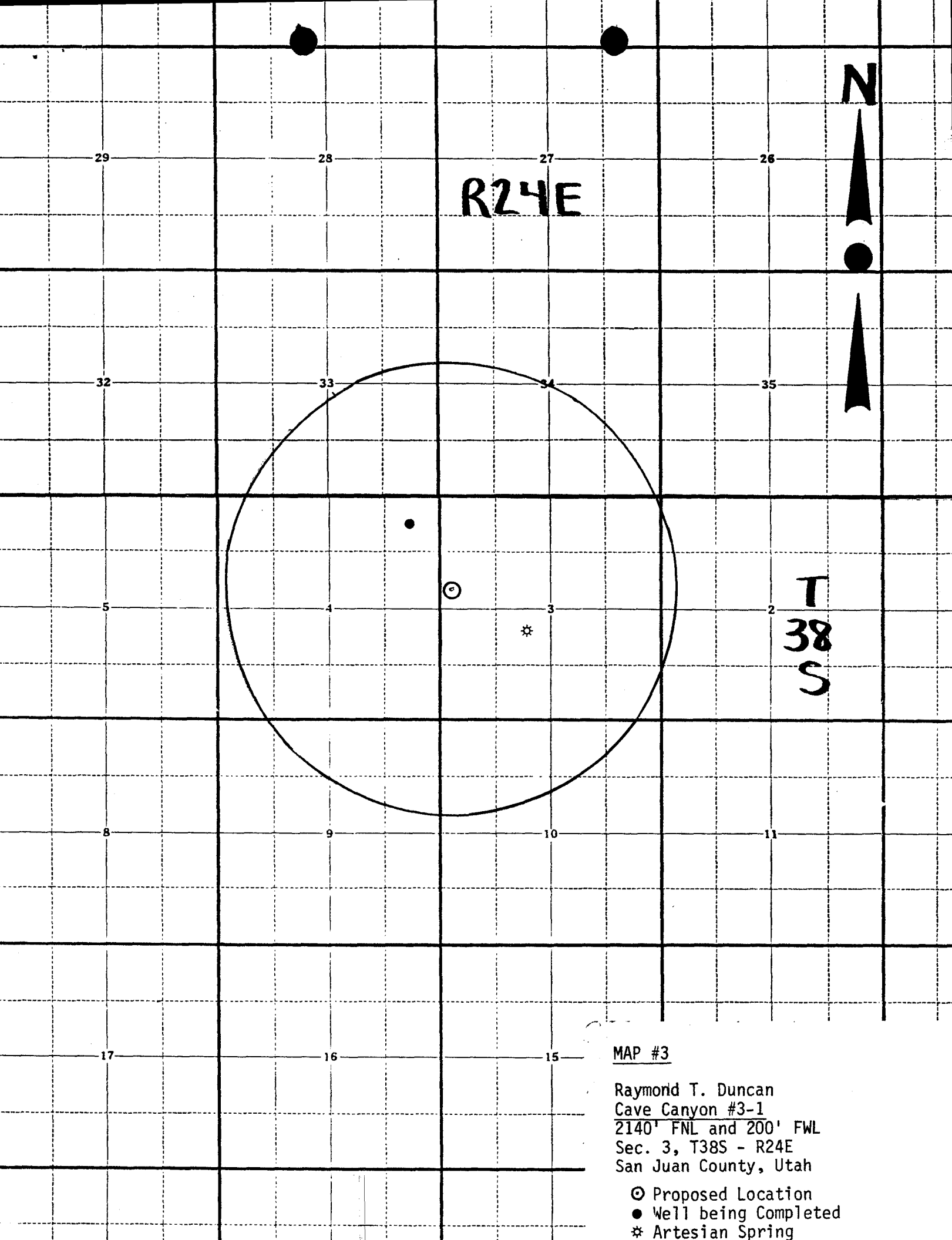
R24E

T38S

MAP #2

Raymond T. Duncan
Cave Canyon #3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

- Proposed Location
- Proposed Access Route
- - - New Access to be Built
- - - Proposed Water Haul Route



R24E

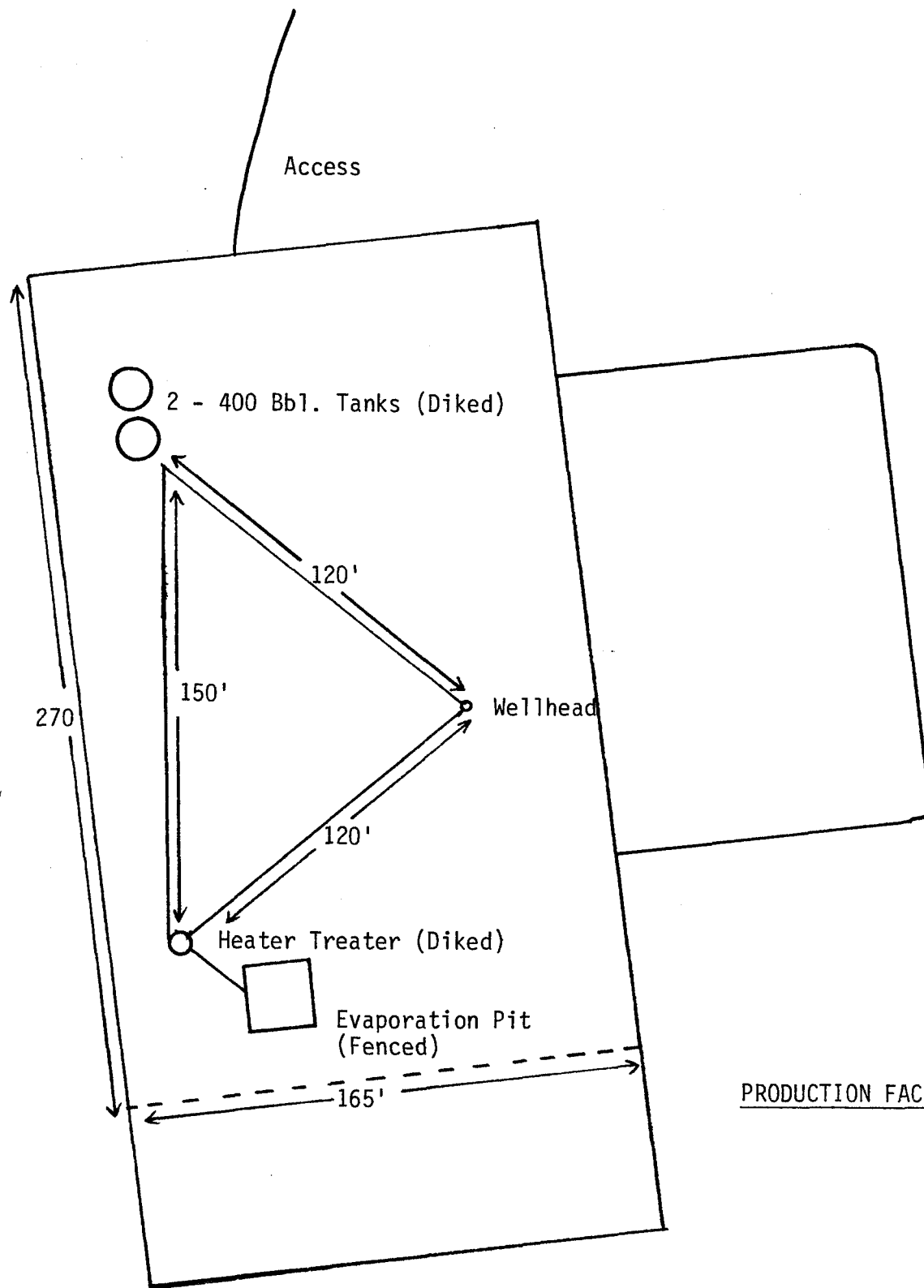
T
38
S

MAP #3

Raymond T. Duncan
Cave Canyon #3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

- ⊙ Proposed Location
- Well being Completed
- ✱ Artesian Spring

Scale: 1" = 50'



PRODUCTION FACILITY LAYOUT

DIAGRAM #1
Raymond T. Duncan
Cave Canyon #3-1
Sec. 3, T38S - R24E
San Juan County Utah

SCALE; 1" = 50'

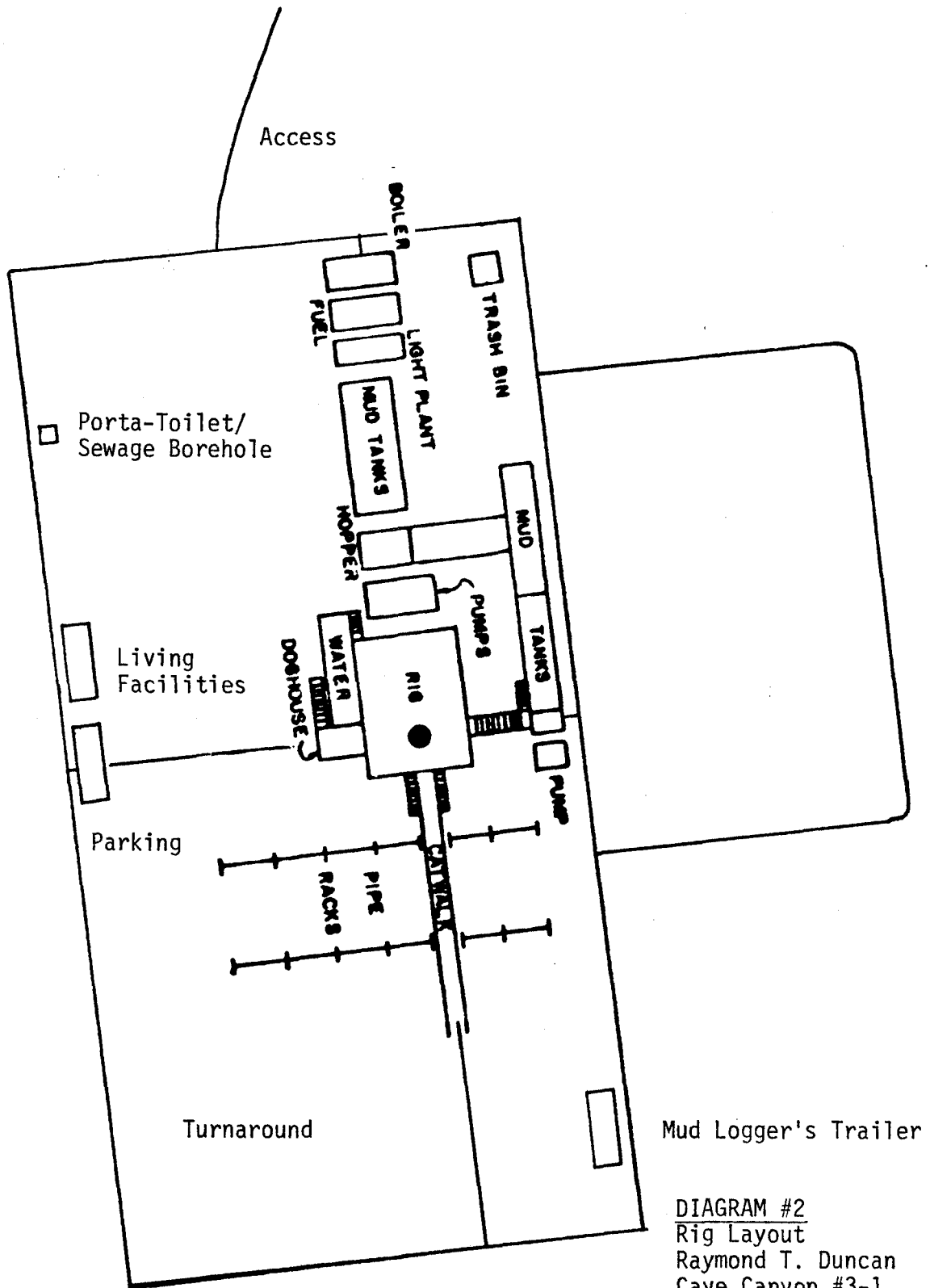


DIAGRAM #2
Rig Layout
Raymond T. Duncan
Cave Canyon #3-1
2140' FNL and 200' FWL
Sec. 3, T38S - R24E
San Juan County, Utah

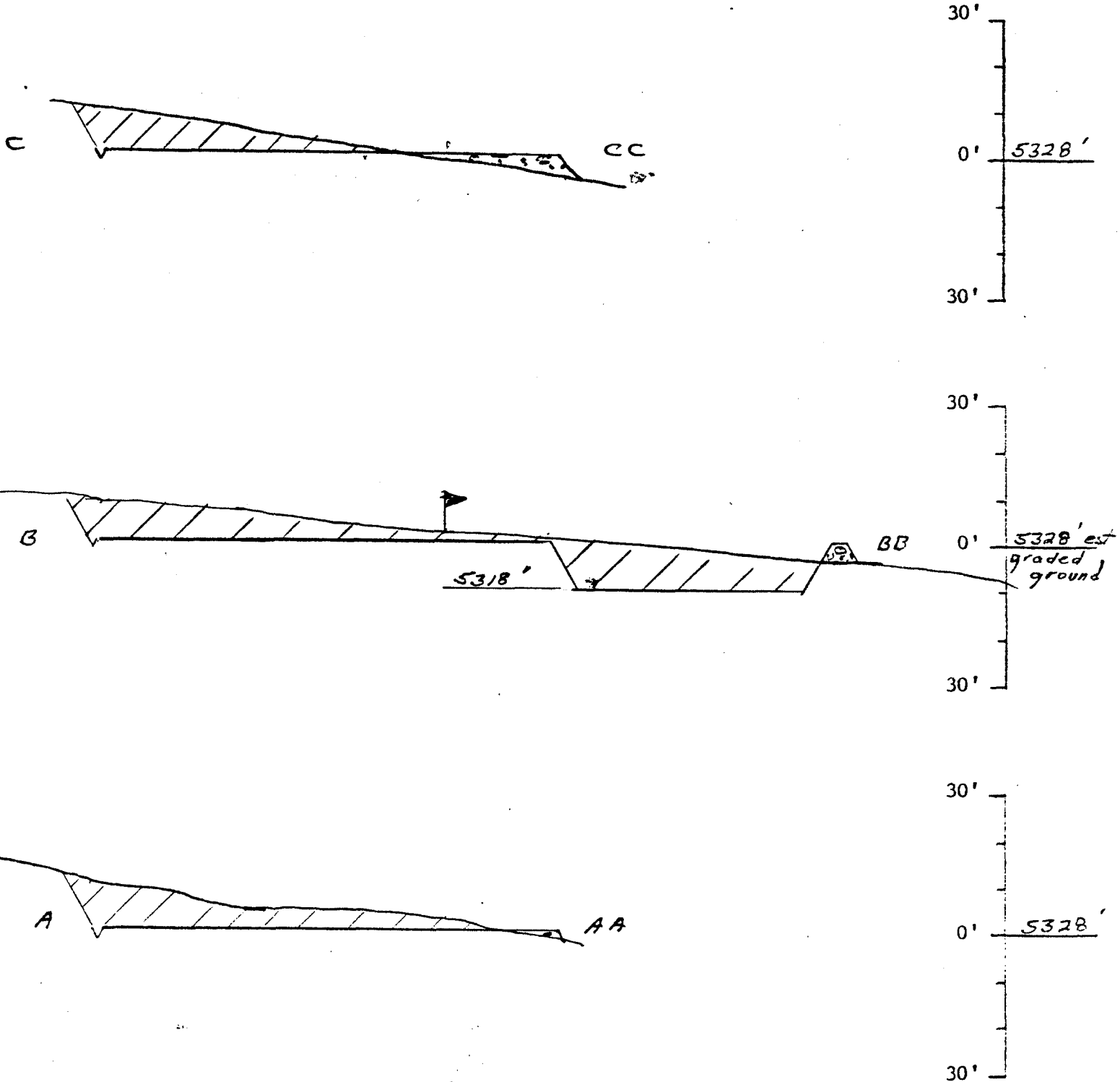
WELL PAD CROSS-SECTION

Well 3-1 Cave Canyon

Cut /////
Fill

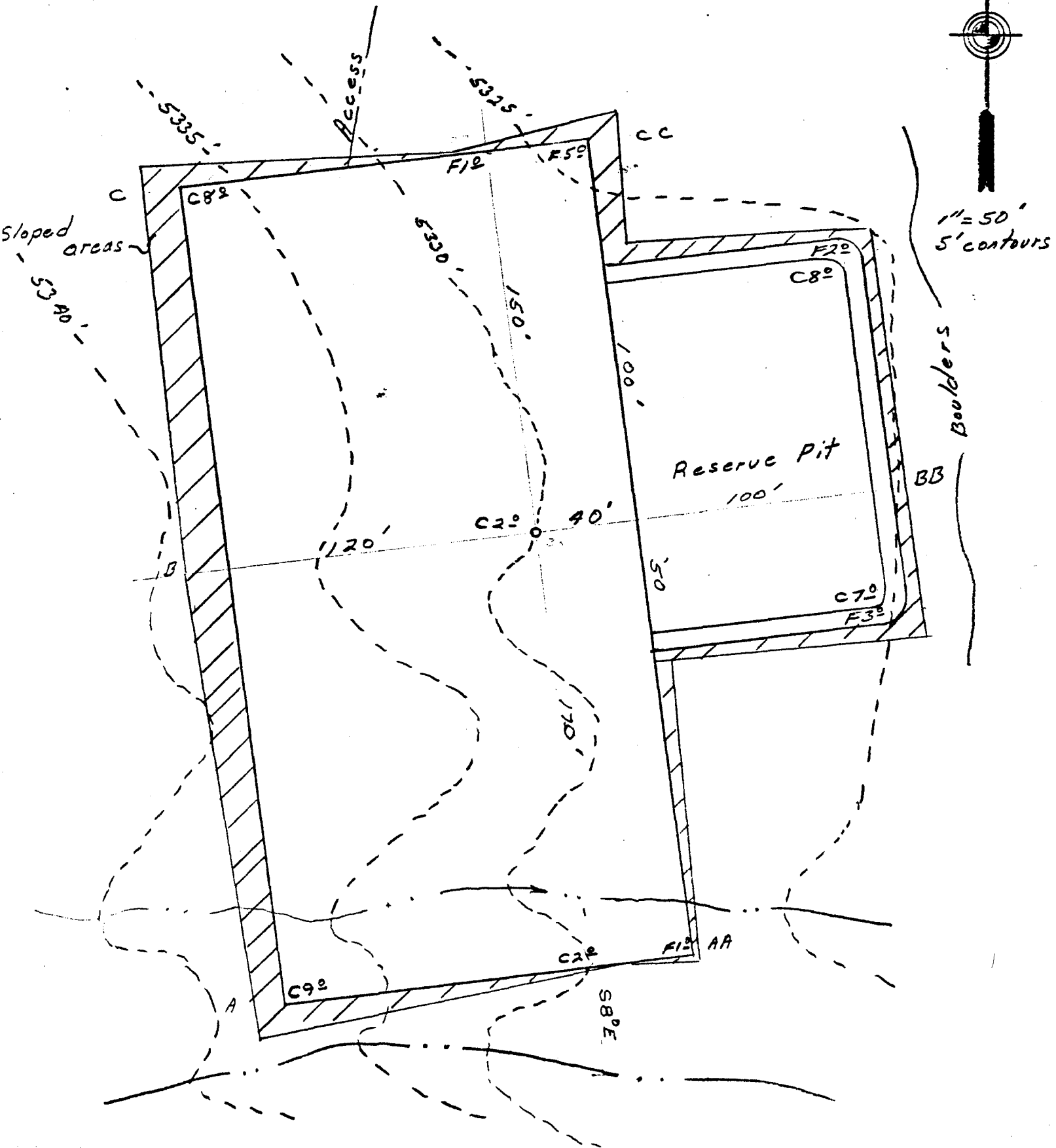
Scales: 1"=50' H.
1"=30' V.

1.7 Vertical Exaggeration



WELL PAD PLAN VIEW

Well 3-1 Cave Canyon



CONFIDENTIAL

082006

OPERATOR

Raymond T. Duncan

DATE

10-29-84

WELL NAME

Cave Canyon #3-1

SEC

SW NW 3

T

38S

R

24E

COUNTY

San Juan

43-037-31095

API NUMBER

Full

TYPE OF LEASE

POSTING CHECK OFF:

☐

INDEX

☐

HL

☐☐

NID

☐

PI

☐☐

MAP

☐☐

PROCESSING COMMENTS:

No other wells within 1000' -Exception location requested. (Lesse holder of Sec 3 & 4)Need water permit

APPROVAL LETTER:

SPACING:

☐

A-3

UNIT

☐

c-3-a

CAUSE NO. & DATE

☐

c-3-b

☒

c-3-c

SPECIAL LANGUAGE: STIPULATIONS

1- WaterCave Canyon323

☒ RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

☒ AUTHENTICATE LEASE AND OPERATOR INFORMATION

☒ VERIFY ADEQUATE AND PROPER BONDING

☒ AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

☐ APPLY SPACING CONSIDERATION

☐ ORDER _____

☐ UNIT _____

☐ c-3-b

☒ c-3-c

☒ CHECK DISTANCE TO NEAREST WELL.

☐ CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

☒ IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

☒ IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

REC'D MDO OCT 24 1984

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Raymond T. Duncan

303/759-3303

3. ADDRESS OF OPERATOR

1777 S. Harrison St., Penthouse 1 Denver, CO 80210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

2140' FNL and 200' FWL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

12.5 miles northwest of Hatch Trading Post

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

200'

16. NO. OF ACRES IN LEASE

1289.44

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2000'

19. PROPOSED DEPTH

6100'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5330' GR

22. APPROX. DATE WORK WILL START*

November 1, 1984

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	2500'	1100 sx or suffic. to circ. to sur
7-7/8"	5-1/2"	15.5#	6100'	400 sx or suffic. to cover zones of interest.

Raymond T. Duncan proposes to drill a well to 6100' to test the Ismay and Lower Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

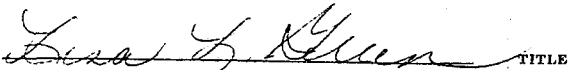
***PLEASE DO NOT RELEASE ANY OF THE ATTACHED INFORMATION TO ANY PARTY OUTSIDE THE BUREAU OF LAND MANAGEMENT. THANK YOU.

" CONFIDENTIAL - TIGHT HOLE "

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED



TITLE

Consultant for
Raymond T. Duncan

DATE

10/22/84

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Kenneth V. Rhea

Acting

DISTRICT MANAGER

DATE

29 OCT 1984

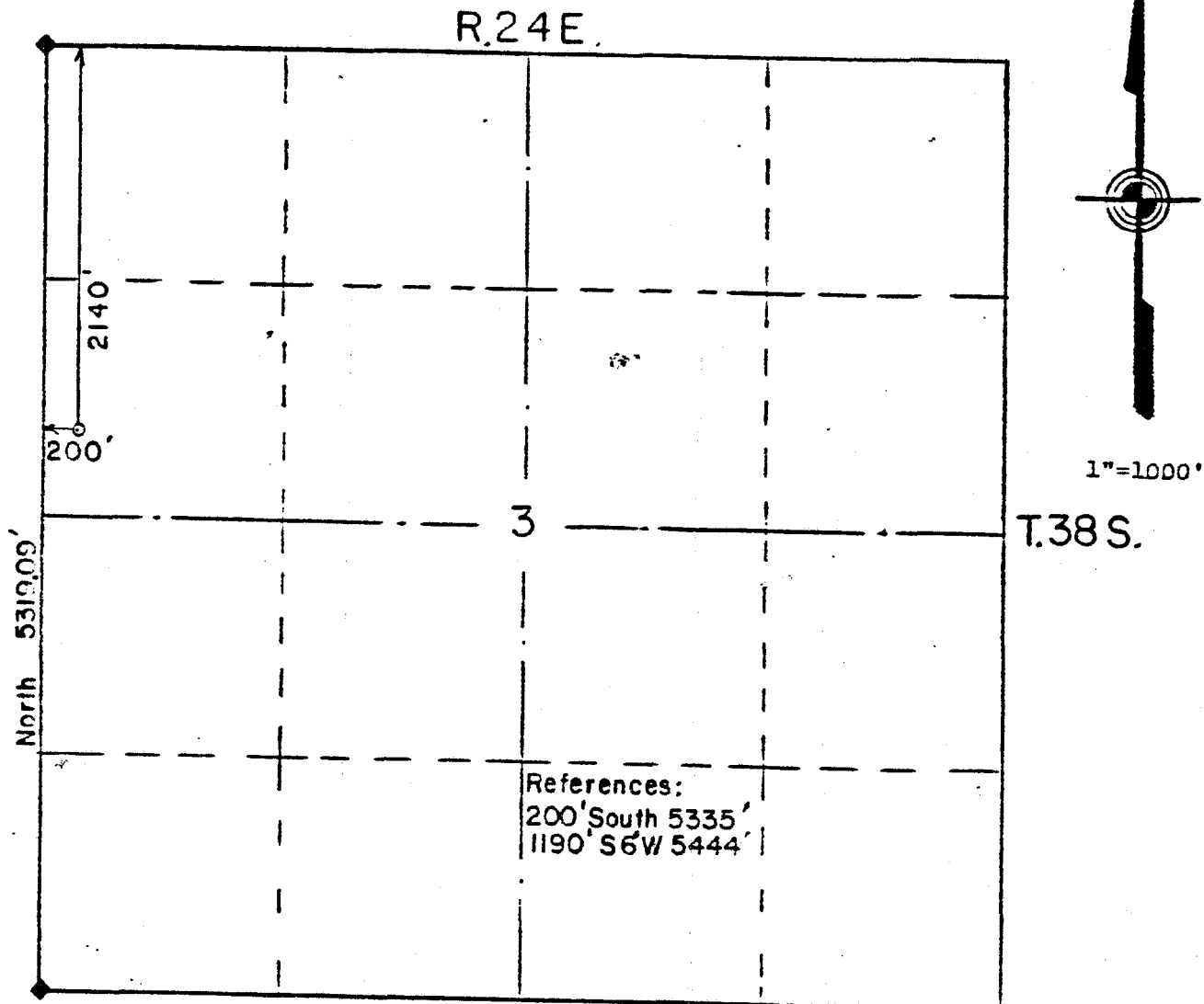
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

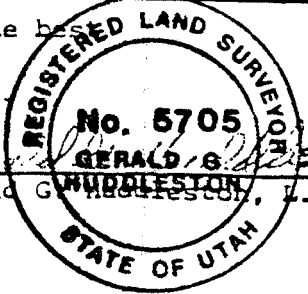
FLARING OR VENTING OF
GAS IS SUBJECT OF NTL 4-A
DATED 1/1/80

WELL LOCATION AND ACREAGE DEDICATION PLAT



Operator R.T. Duncan		Well name 3-1 Cave Canyon	
Section 3	Township 38 South	Range 24 East	Meridian SLM
Footages 2140' FN & 200' FW		County/State San Juan, Utah	Elevation 5330'
Formation	Dedicated Acreage	Requested by Lisa Green	

The above plat is true and correct to the best of my knowledge and belief.



No. 5705
GERALD G. HUDDLESTON
Gerald G. Huddleston, L.S.

ONSITE

DATE: October 15, 1984

PARTICIPANTS:

TITLES:

Your contact with the District Office is: Robert (Bob) Graff

Office Phone: 801-259-6111 Ext 216

Petroleum Engineer
Home Phone: 801-259-6088

City: Moab

State: Utah

Resource Area Manager's address and contacts are: San Juan Resource Area

Address: 480 South First West, P.O. Box 7, Monticello, Utah 84535

Your contact is: Rich McClure

Office Phone: 801-587-2201

Home Phone: 801-587-2874



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

October 31, 1984

Raymond T. Duncan
1777 S. Harrison St., Penthouse 1
Denver, Colorado 80210

Gentlemen:

Re: Well No. Cave Canyon #3-1 - SW NW Sec. 3, T. 38S, R. 24E
2140' FNL, 200' FWL - San Juan County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

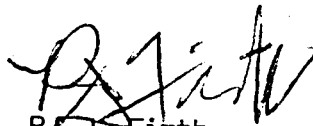
1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 533-5771, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2
Raymond T. Duncan
Well No. Cave Canyon #3-1
October 31, 1984

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31095.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

API #43-037-31095

NAME OF COMPANY: DUNCAN OILWELL NAME: CAVE CANYON FED. 3-1SECTION SW NW 3 TOWNSHIP 38S RANGE 24E COUNTY San JuanDRILLING CONTRACTOR ColemanRIG # 4SPUDDED: DATE 11-4-84TIME 12:00 AMHow RotaryDRILLING WILL COMMENCE REPORTED BY CarolynTELEPHONE # 303-759-3303DATE 11-5-84 SIGNED AS

CONFIDENTIAL: TIGHT HOLE

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well ☐ gas well ☐ other ☐

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison, P-1, Denver

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See Space 17 below.)
AT SURFACE: 2140' FNL: 200' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) ☐

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐

5. LEASE
U-47876

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
Cave Canyon Federal

9. WELL NO.
#3-1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 3-38S-24E

12. COUNTY OR PARISH **13. STATE**
San Juan UT

14. API NO.
43-037-31095

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5330' GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Above-captioned well was spud November 4, 1984, at 12:01 AM.
Coleman Rig #4.

CONFIDENTIAL: TIGHT HOLE

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED W.S. Fallin TITLE Prod. Manager DATE November 5, 1984

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: _____

CONFIDENTIAL - TIGHT HOLE
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
Raymond T. Duncan 303/759-3303

3. ADDRESS OF OPERATOR
1777 S. Harrison Street, Penthouse #1, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
2140' FNL & 200' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5330' GR

5. LEASE DESIGNATION AND SERIAL NO.
U-47876

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
Cave Canyon

9. WELL NO.
#3-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 3, T38S-R24E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐ PULL OR ALTER CASING ☒
FRACTURE TREAT ☐ MULTIPLE COMPLETE ☐
SHOOT OR ACIDIZE ☐ ABANDON* ☐
REPAIR WELL ☐ CHANGE PLANS ☒
(Other) ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐ REPAIRING WELL ☐
FRACTURE TREATMENT ☐ ALTERING CASING ☐
SHOOTING OR ACIDIZING ☐ ABANDONMENT* ☐
(Other) ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The amount of surface casing to be run was incorrectly stated in the previously submitted A.P.D. 1900 feet of 8 5/8", 24# casing will be run rather than 2500'.

CONFIDENTIAL

18. I hereby certify that the foregoing is true and correct
SIGNED Raymond R. Duncan TITLE Consultant for Raymond R. Duncan DATE 10/26/84
(This space for Federal or State office use)

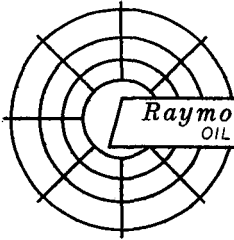
APPROVED BY Federal approval of this action is required before commencing operations. TITLE
CONDITIONS OF APPROVAL, IF ANY

ACCEPTED
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

cc: 3 - BLM - Moab, UT
1 - Raymond T. Duncan

*See Instruction on Reverse Side

BY: Raymond R. Duncan



Raymond T. Duncan
OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

RECEIVED
DEC 04 1984

DIVISION OF
OIL, GAS & MINING

November 30, 1984

State of Utah
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

**CONFIDENTIAL:
TIGHT HOLE**

ATTN: Dianne R. Nielson
Director

RE: Cave Canyon Fed. 3-1
SW NW 3-38S-24E
San Juan Co., UT

Gentlemen:

Duncan is requesting that all information for the above-captioned well be held in CONFIDENTIAL STATUS - TIGHT HOLE for the maximum period allowable. Thank you for your consideration in this matter.

Please contact our office if you have questions or need additional information.

Very truly yours,
RAYMOND T. DUNCAN

W.S. Fallin

W.S. Fallin
Production Manager

c1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form ⁹ 8-329 Rev. Feb 76
OMB 42-R0356

MONTHLY REPORT
OF
OPERATIONS

Lease No. Cave Canyon 3-1 U-47876

Communitization Agreement No. N/A

Field Name Wildcat

Unit Name N/A

Participating Area _____

County San Juan

State UT

Operator Raymond T. Duncan

☐ Amended Report

The following is a correct report of operations and production (including status of all unplugged wells) for the month of
November, 1984

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

V/L No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	Barrels of Oil	MCF of Gas	Barrels of Water	Remarks
3-1	3	38S	24E	N/A	N/A	CONFIDENTIAL: TIGHT HOLE RECEIVED DEC 10 1984 DIVISION OF OIL, GAS & MINING			Spud 11-4-84 TD 6119' 11/18/84 Waiting on gas line before completing well. 13 3/8" csg set @110' 5 1/2" csg set @ 6081'

*If none, so state.

Disposition of production (Lease, Participating Area, or Communitized Area basis)

DEC 10 1984

Oil & Condensate
(BBLs)

Gas
(MCF)

Water
(BBLs)

*On hand, Start of Month

*Produced

*Sold

*Spilled or Lost

*Flared or Vented

*Used on Lease

*Injected

*Surface Pits

*Other (Identify)

*On hand, End of Month

*API Gravity/BTU Content

N/A

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX

Authorized Signature: _____

W.S. Fallin

Address: 1777 So. Harrison, P-1
Denver, CO 80210

Title: _____

Production Manager

Page 1 of 1



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 12, 1985

CONFIDENTIAL

Mr. Raymond Duncan
1777 South Harrison, Penthouse 1
Denver, Colorado 80210

Gentlemen:

Re: Well No. Cave Canyon 3-1 - Sec. 3, T. 38S., R. 24E.
San Juan County, Utah - API #43-037-31095

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

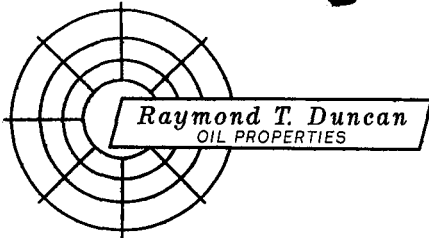
Please complete the enclosed Form OGC-3, and forward it to this office as soon as possible, but not later than April 12, 1985.

Sincerely,

Pam M. Kenna
Well Records Specialist

Enclosure

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File
0123S/03



1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

March 26, 1985

RECEIVED

MAR 29 1985

State of Utah Natural Resources
Division of Oil, Gas & Mining
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

**DIVISION OF OIL
GAS & MINING**

ATTN: Pam M. Kenna
Dianne R. Nielson
Ronald J. Firth
John R. Baza

RE: Cave Canyon Fed. 3-1
Sec. 3-38S-24E
San Juan Co., UT
API# 43-037-31095

Dear Ms. Kenna:

In reply to your letter of March 12, 1985, we wish to advise you that the subject well has not yet been completed due to the lack of a gas line. We are anticipating completion sometime in June, 1985, and will file the requested OGC-3 upon completion.

Please contact our office if you have questions.

Very truly yours,
RAYMOND T. DUNCAN

W.S. Fallin

W.S. Fallin
Production Manager

c1



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 3, 1985

Raymond T. Duncan
1777 Harrison Ph #1
Denver, Colorado 80210

Gentlemen:

Re: Well No. Cave Canyon 3-1 - Sec. 3, T. 38S., R. 24E.,
San Juan County, Utah - API #43-037-31095

Our records indicate that you have not filed drilling reports for the months of December 1984 to present on the above referenced well. Our rules and regulations stipulate that these reports be filed by the sixteenth of each month until the well is completed.

Enclosed are forms for your convenience in filing the necessary reports as soon as possible but no later than May 17, 1985.

Thank you for your cooperation in this matter.

Sincerely,

Pam Kenna
Well Records Specialist

Enclosure
cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File

0170S/65

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

CONFIDENTIAL:
TIGHT HOLE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
 Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47876
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1777 So. Harrison, P-1 Denver, CO 80210		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FNL 200' FWL		8. FARM OR LEASE NAME Cave Canyon Federal
14. PERMIT NO. API# 43-037-31095		9. WELL NO. 3-1
15. ELEVATIONS (Show whether OP, RT, GR, etc.) 5330 Ungraded		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 3-38S-24E
		12. COUNTY OR PARISH San Juan
		13. STATE UT

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Current Operations:

Subject well has been waiting on pipeline from December, 1984 to May, 1985. We wish to advise you that we are anticipating completion sometime in June, 1985 pending pipeline arrangements. A completion report will be submitted upon completion.

CONFIDENTIAL: TIGHT HOLE

RECEIVED

MAY 13 1985

**DIVISION OF OIL
GAS & MINING**

18. I hereby certify that the foregoing is true and correct

SIGNED W. J. Fallon TITLE Production Manager DATE 5/9/85
W.S. Fallon

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

**CONFIDENTIAL;
TIGHT HOLE**

STATE OF UTAH

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

OIL & GAS CONSERVATION COMMISSION

SUNDRY NOTICES AND REPORTS ON WELLS(Do not use this form for proposals to drill or to deepen or plug back or to divert the well.
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.	U-47876
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	N/A
7. UNIT AGREEMENT NAME	N/A
8. FARM OR LEASE NAME	Cave Canyon Fed.
9. WELL NO.	3-1
10. FIELD AND POOL, OR WILDCAT	Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	Sec. 3-38S-24E
12. COUNTY OR PARISH	San Juan
13. STATE	UT

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	AUG 09 1985
2. NAME OF OPERATOR	Raymond T. Duncan
3. ADDRESS OF OPERATOR	1777 So. Harrison, P-1 Denver, CO 80210
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface	2140' FNL, 200' FWL
14. PERMIT NO.	API# 43-037-31095
15. ELEVATIONS (Show whether DF, RT, GR, etc.)	5330' Ungraded

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Current Operations:

Subject well has been waiting on pipeline since December, 1984.
We are anticipating completion in late September or October, 1985,
pending pipeline arrangements. A completion report will be submitted
upon completion of the well.

CONFIDENTIAL: TIGHT HOLE

18. I hereby certify that the foregoing is true and correct

SIGNED <u>W.S. Fallin</u>	TITLE <u>Production Manager</u>	DATE <u>8/7/85</u>
(This space for Federal or State office use)		
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 29, 1985

Raymond T. Duncan
P.O. Box 211
La Salle, Illinois 61301

Gentlemen:

Re: Well No. Cave Canyon 3-1 - Sec. 3, T. 38S., R. 24E.,
San Juan County, Utah - API #43-037-31095

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the above referenced well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, and forward it to this office as soon as possible, but not later than August 12, 1985.

Sincerely,

Pam Kenna
Well Records Specialist

Enclosure

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File

0161S/34

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

CONFIDENTIAL:
TIGHT HOLE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		3. LEASE DESIGNATION AND SERIAL NO. U-47876
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1777 So. Harrison, P-1 Denver, CO 80210		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2140' FNL; 200' FWL		8. FARM OR LEASE NAME Cave Canyon Federal
10. PERMIT NO. 43-037-31095		9. WELL NO. 3-1
11. ELEVATIONS (Show whether of, at, or, etc.)		10. FIELD AND POOL, OR WILDCAT Wildcat
12. COUNTY OR PARISH San Juan		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA Sec. 3-38S-24E
13. STATE UT		

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Duncan respectfully requests an extension of time for a period of one year to maintain the CONFIDENTIAL - TIGHT HOLE STATUS beginning immediately.

This well has not yet been completed and is awaiting pipeline facilities.

CONFIDENTIAL:
TIGHT HOLE

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 9/18/85

BY: John R. Day

18. I hereby certify that the foregoing is true and correct

SIGNED

W.S. Fallin

TITLE

Production Manager

DATE

9/12/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL IF ANY:

RECEIVED

Copy

Form 9-331
Dec. 1973

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

OCT 28 1985

Form Approved
Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil <input checked="" type="checkbox"/> well gas <input type="checkbox"/> well other <input type="checkbox"/>	
2. NAME OF OPERATOR Raymond T. Duncan	
3. ADDRESS OF OPERATOR 1777 So. Harrison, P-1 Denver, CO 80210	
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) AT SURFACE: 2140' FNL: 200' FWL AT TOP PROD. INTERVAL: same AT TOTAL DEPTH:	

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) <u>Ready to inspect</u>	

5. LEASE U-47876	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
7. UNIT AGREEMENT NAME N/A	
8. FARM OR LEASE NAME Cave Canyon Federal	
9. WELL NO. #3-1	
10. FIELD OR WILDCAT NAME Cave Canyon	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 3-38S-24E	
12. COUNTY OR PARISH San Juan	13. STATE UT
14. API NO. 43-037-31095	
15. ELEVATIONS (SHOW OF, KDB, AND WD) 5342' KB	

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Subject well is ready for final inspection. Pits have been restored, and seeded.

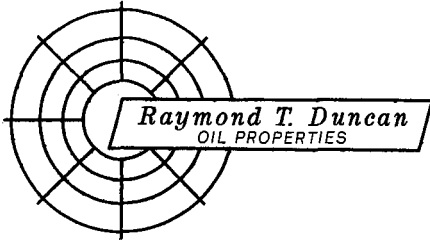
Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED John A. Beltridge TITLE Oper. Supt. DATE 10/23/85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

November 22, 1985

Division of Oil, Gas & Mining
355 W. North Temple
Salt Lake City, UT 84180

CONFIDENTIAL: TIGHT HOLE

RE: Cave Canyon Fed. 3-1
Sec. 3-38S-24E
San Juan Co., UT

Gentlemen:

Enclosed are three copies of the Completion Report for the captioned well. Duncan requests that all information be kept in a CONFIDENTIAL TIGHT HOLE STATUS for the maximum allowable period.

Please contact our office if you have questions or need additional information.

Very truly yours,
RAYMOND T. DUNCAN

John A. Bettridge
Operations Superintendent

cl
encl.

RECEIVED

NOV 25 1985

DIVISION OF OIL
GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

CONFIDENTIAL:
TIGHT HOLE

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____				5. LEASE DESIGNATION AND SERIAL NO. U-47876	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____				6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR Raymond T. Duncan				7. UNIT AGREEMENT NAME N/A	
3. ADDRESS OF OPERATOR 1777 So. Harrison, P-1 Denver, CO 80210				8. FARM OR LEASE NAME Cave Canyon Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 2140' FNL: 200' FWL SW NW At top prod. interval reported below At total depth same				9. WELL NO. 3-1	
14. PERMIT NO. API 43-037-31095				DATE ISSUED 10/29/84	
15. DATE SPUDDED 11/4/84				16. DATE T.D. REACHED 11/16/84	
17. DATE COMPL. (Ready to prod.) 11/21/85				18. ELEVATIONS (DF, RES, RT, GR, ETC.) 5328' GL; 5342' KB	
19. ELEV. CASINGHEAD				20. TOTAL DEPTH, MD & TVD 6119'	
21. PLUG, BACK T.D., MD & TVD 6050'				22. IF MULTIPLE COMPL., HOW MANY N/A	
23. INTERVALS DRILLED BY →				ROTARY TOOLS 0-6119'	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) Upper Ismay 5735-5872'				25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN CNL-FDC, Sonic, DLL, Dipmeter, CBL				27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	52#	110'	17 1/2"	136 sx. Class B + Add.	
8 5/8"	24#	1900'	12 1/4"	1205 sx. Class B + Add.	
5 1/2"	15.5#	6119'	7 7/8"	400 sx. Class B + Salt	
29. LINER RECORD					
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	
N/A					
30. TUBING RECORD					
SIZE	DEPTH SET (MD)	PACKER SET (MD)			
2 7/8	5695'	5664'			
31. PERFORATION RECORD (Interval, size and number) 5735-5872' w/4JSPF.					
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
DEPTH INTERVAL (MD)			AMOUNT AND KIND OF MATERIAL USED		
N/A					
33. PRODUCTION					
DATE FIRST PRODUCTION 11/7/85		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing			WELL STATUS (Producing or shut-in) producing
DATE OF TEST 11/21/85	HOURS TESTED 24	CHOKE SIZE 48/64	PROD'N. FOR TEST PERIOD →	OIL—BBL. 763	GAS—MCF. 549
FLOW. TUBING PRESS. 150 psi	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL. 763	GAS—MCF. 549	WATER—BBL. 0
					GAS-OIL RATIO 700
					OIL GRAVITY-API (CORR.) 40.8
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold ; During testing, gas was flared from 11/7/85 - 10/12/85					TEST WITNESSED BY Robert Knuckles
35. LIST OF ATTACHMENTS DST; Geologist Report					
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records					
SIGNED <u>W.S. Fallin</u>		TITLE <u>Production Manager</u>		DATE <u>11/22/85</u>	

See Spaces for Additional Data on Reverse Side

RECEIVED

NOV 25 1985

DIVISION OF OIL
GAS & MINING

WELL DATA

OPERATOR: RAYMOND T. DUNCAN
Duncan Exploration Company
1777 South Harrison Street
Penthouse One
Denver, Colorado 80210
Don Lehman, Geologist
(303) 759-3303

OTHER INTERESTED
PARTIES: Northstar Energy Company
Peter W. Hummel
P. O. Box 7420
Reno, Nevada 89510

WELL NAME: No. 3-1 Cave Canyon Federal

LOCATION: SW NW Section 3
Township 38 South, Range 24 East
2140' FNL, 200' FWL
San Juan County, Utah

FIELD: Cave Canyon Field

ELEVATIONS: Ground Level - 5328'
Kelly Bushing - 5342'

GEOLOGIST: Jim Holst
Intermountain Wellsite Geologists
P. O. Box 4007
Casper, Wyoming 82604
(307) 266-2009

SPUD DATE: Midnight
November 3, 1984

CEASED DRILLING: 1:00 AM
November 16, 1984

MUDLOGGING: Terra Services, Inc.
163 South Van Gordon Street
Lakewood, Colorado 80228
(303) 988-5111
One man logging unit - TM161
Logger: Mike Papacek

COMPANY MAN: J. A. "Arkie" Browning
P. O. Box 1058
Cortez, Colorado 81321
Home - (303) 565-8806
Mobile - (303) 562-3115

RECEIVED

NOV 25 1984

DIVISION OF OIL
& GAS & MINING

CONTRACTOR: Rig No. 4
Coleman Drilling Company
P. O. Box 3337
Farmington, New Mexico 87401
(505) 327-4935

TOOLPUSHER: Don Vestar and John Richardson

DRILLERS: L. Decker
C. R. Hamlin
T. Thompson
K. Rhodes

RIG EQUIPMENT: Type Drawworks: N-46 Skytop Brewster
Derrick: 127' Dynamic, 450,000 lb max
Pump #1: O.P.I. 700, 8" stroke, 5 1/2" liner
96 SPM
Pump #2: Wilson 600, 14" stroke, 5 1/2" liner,
62 SPM
Drill Pipe: 4 1/2" 16.60 grade E X-Hole
Drill Collars: 6 1/2" X-Hole

DRILLING FLUIDS: Circle A Mud Company
314 North Auburn, Suite 208
Farmington, New Mexico 87401
Engineer: Don Bryant
Mud Type: Dispersed Chem-Gel
(505) 326-7590

SURFACE CASING: Driller - 13 3/8" set at 110'
8 5/8" set at 1900'
Logger - 8 5/8" at 1894'

TOTAL DEPTH: Driller - 6119'
Logger - 6118'

BOTTOM HOLE
TEMPERATURE: DST No. 1 - 132°F
E-Log - 136°F

SAMPLES: 10' samples from 4000' to T.D.
10' dry cut samples from 4000' to T.D. sent
to Duncan Exploration in Denver, Colorado
then stored at Anderson Stratigraphic in
Denver. Show samples sent to Duncan in Denver.

CORES: No cores cut.

DRILL STEM TEST No. 1: Upper Ismay Zone (5730' to 5803') 73' test
Halliburton Services
P. O. Box 960
Farmington, New Mexico 87401
(505) 325-3575
Tester - Howard Bell

DRILL STEM TEST NO. 2: No Lower Desert Creek Test

ELECTRICAL LOGS:

Schlumberger Well Services
P. O. Box 250
Farmington, New Mexico 87401
(505) 325-5006
Engineer - Chet Badowski

ELECTRICAL LOGS RUN:

DIL with GR and CAL
Base of surface casing (1900') to T.D.
BHC Acoustic with GR and CAL
4400' to T.D.
FDC/CNL with GR and CAL
4400' to T.D.
DIPMETER
5600' to T.D.

E-LOG INFORMATION

FORMATION TOPS

K.B. = 5342'

<u>Formation</u>	<u>Sample Top</u>	<u>E-Log Top</u>	<u>Subsea</u>
PENNSYLVANIAN PERIOD			
Hermosa Group (Honaker Trail Fm)	4732	4730	+612
PARADOX FORMATION			
Upper Ismay Zone	5690	5702	-360
Lower Ismay Zone	5912	5916	-574
Gothic Shale Zone	5964	5961	-619
Desert Creek Zone	5992	5989	-647
Lower Desert Creek Porosity	6045	6043	-701
Chimney Rock Shale Zone	6064	6061	-719
Akah Zone	6090	6085	-743
T.D.	6119	6118	-776

DRILL STEM TEST DATA

Drill Stem Test No. 1: Upper Ismay Zone (5730' - 5803') 73' test

IF - 15 minutes; tool opened with strong blow to bottom bubble bucket immediately. Gas to surface in 7 minutes at 120 lbs. Oil to surface in 15 minutes at 375 lbs on 3/8" surface choke. Maximum calculated gas rate 1300 MCF.

ISI- 60 minutes; surface action slowly died.

FF - 45 minutes; tool opened with strong blow 200 lbs on 3/4" choke, increasing to 300 lbs in 15 minutes, 400 lbs in 45 minutes. Flowed 5 barrels mud cut oil and 55 barrels gas cut oil.

FSI- 140 minutes; surface action slowly died.

Field Pressures:

Depth	Top Chart	Bottom Chart
IH	5712	5803
IF	2966	2962
ISI	1346-1670	1452-1802
FF	2074	2099
FSI	1427-1818	1479-1856
FH	2074	2099
	2966	2962

Bottom Hole Temperature - 132°F

Recovery: In drill pipe - 25 barrels gas cut oil reversed out
40.8 API Gravity at 60°F

In sample chamber - did not work.

Comments and Observations:

Drill Stem Test No. 1 was a successful mechanical test except for a malfunction of the sample chamber, we did not recover anything from the chamber. The packers set and held, no fluid was lost downhole.

No formation water was recovered along with significant amounts of oil and gas indicate an excellent potential reservoir exists in this zone at this location. Good porosity along with excellent permeability with oil saturation allowed us to flow oil to surface during this drill stem test.

SHOW ANALYSIS

Hermosa (Honaker Trail Formation) E-Log 5105'-5120'

The white to light gray to clear, very fine grained to scattered medium grained sandstones exhibited poor porosity. The sandstones broke down poorly, 1 minutes per foot from 2 to 2 1/2 minutes per foot. The sands of the Hermosa are clay filled and very tight. Poor gas shows are present at this location.

Upper Ismay Zone (Paradox Formation) E-Log 5734'-5880'

The dark grayish brown to dark brown dolomitic limestones of this zone broke down in drilling rate from 4 to 5 minutes per foot to an average of .5 to 2 minutes per foot for the entire interval. These limestones were microsucrosic to sucrosic with abundant visible pinpoint to abundant small vugs with calcite crystalline lined larger vugs present. Excellent hydrocarbon fluorescence and cut was observed from examination of the samples. Limestone porosity values averages 13.5% throughout the net pay zones and combined with high resistivity values averaging 760 ohms to a calculated water saturation average value of only 5%. An oil column or gross pay of 139' exists in this zone with a total net pay of 106'. An excellent gas show was present throughout this interval. Several gas peaks were observed; one of the largest, 720 units C Total, with a gas chromatograph break down of 1500 units C1, 1440 units C2, 976 units C3, 96 units IC4, 176 units NC4, and 20 units C5. We drill stem tested the top 69' and flowed an estimated 1300 MCF gas before we flowed oil to surface. No indication of formation water was seen during the drilling, testing, and electrical logging of this interval.

Lower Ismay Zone (Paradox Formation)

No shows were present in the light brownish gray, microcrystalline, slightly dolomitic limestones of this zone. These limestones were dense with no porosity and no hydrocarbons present.

Upper Desert Creek Zone (Paradox Formation)

These light brown to light grayish brown microcrystalline to slightly sucrosic dolomites were dense and argillaceous with mostly poor to no porosity present. No significant oil or gas shows were observed while penetrating this zone.

Lower Desert Creek Zone (Paradox Formation)

The light to medium brown dolomites of this zone were microcrystalline to slightly sucrosic with no visible porosity. They also exhibited anhydritic and argillaceous infilling and matrix. No significant increases in total gas was observed and no hydrocarbon shows were observed from examination of the samples.



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

August 27, 1986

Raymond T. Duncan
1777 South Harrison St. #1
Denver, Colorado 80210

Gentlemen:

Re: Well No. Cave Canyon Federal 3-1 - Sec. 3, T. 38S., R. 24E.,
San Juan County, Utah - API #43-037-31095

A review of our records indicates that the CNL-FDC, Sonic, DLL, Dipmeter and CBL run on the referenced well as indicated on the Well Completion Report dated November 22, 1985 have not been received.

Rule 312, Oil and Gas Conservation General Rules, requires that copies of the well logs be submitted within 90 days of the date of completion.

Please use the address listed below to provide the requested information the required at your earliest convenience, but not later than September 10, 1986.

Utah Division of Oil, Gas and Mining
Attention: Suspense File - Norm Stout
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Sincerely,

Ronald J. Firth,
Associate Director

pk

cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
Well File
Suspense File

0431S/7

TRANSFER OF GEOLOGICAL DATA

Date 8-29-86

TO: Utah Division of Oil, Gas + Mining Attention Suspense File - Norm Stout
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

FROM:

Duncan Oil
 1777 South Harrison Street
 Penthouse One
 Denver, Colorado 80210

RE: _____

QUANTITY

DESCRIPTION OF DATA

1	Cave Canyon 3-1	CNL/FOC
1	Cave Canyon 3-1	Sonic
1	Cave Canyon 3-1	DI-SFL
1	Cave Canyon 3-1	Dipmeter
1	Cave Canyon 4-2	CNL/FOC
1	Cave Canyon 4-2	Sonic
1	Cave Canyon 4-2	DLL/MSFL
1	Cave Canyon 4-2	CBL

INSTRUCTIONS: Please acknowledge receipt promptly.

RECEIVED BY: _____ DATE: _____

Aug 28, 1986

090222

Utah Division of Oil, Gas + Mining
Attention: Suspense File Norm Stout
355 West North Temple
3 Triad Center Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
SEP 02 1986

DIVISION OF
OIL, GAS & MINING

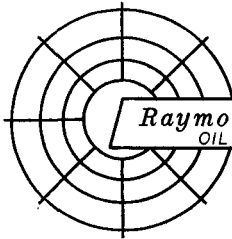
Dear Mr. Stout:

Here are the copies of the logs you requested. Please sign and return 1 copy of the transmittal for our records. Thank you.

Sincerely,

Ruth Hummel

Duncan Oil



Raymond T. Duncan
OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

RECEIVED
DEC 12 1988

DIVISION OF
OIL, GAS & MINING

December 9, 1988

Bureau of Land Management
P. O. Box 970
Moab, Utah 84532

Re: Cave Canyon Batttery
T38S-R24E
San Juan Co., Utah

Gentlemen:

Enclosed is the sundry notice regarding the installation of a IACT Unit on the above captioned battery.

Please contact me if you have any questions or need additional information.

Very truly yours,

RAYMOND T. DUNCAN

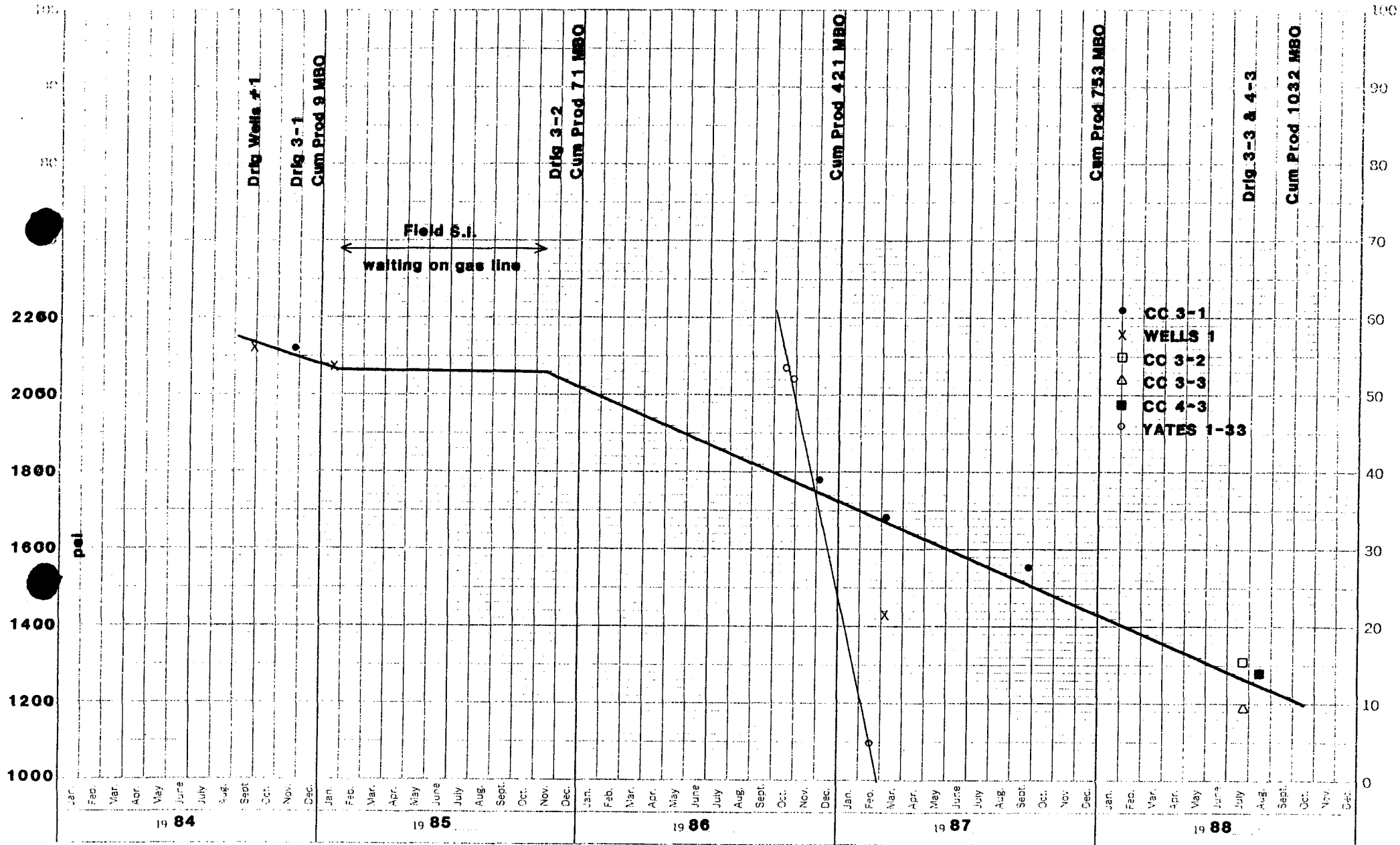
J. A. Betteridge

J. A. Betteridge
Operations Superintendent

JAB:nr
Enclosures

CAVE CANYON FIELD RESERVOIR PRESSURE vs TIME

WSF 11/4/88



The well name, location and borehole reference data were furnished by the customer.

```
PSAL 50000.0
GGRD .0100000
SHT 80.0000
GTSE TEMP
BHS OPEN
```

PPH
DF/F
DEGF

ANGLE	0.0	DEG
BHFL	WATE	
BHT	180.000	DEGF
BS	7.87500	IN

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
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98	98	98
99	99	99
100	100	100

IHY	10.0000 F3	LEFT EDGE
ICY	10.0000 F3	RIGHT EDGE

CEMENT VOLUME = 346.276 F3 (ASSUMING 5.5000 IN O.D. CASING)
HOLE VOLUME = 614.772 F3
FROM 6113.5 TO 4483.0 FEET

		TENS(LB)	
		10000.	
CALI(IN)		TNPH	LIMESTONE MATRIX
6.0000	16.000	.30000	-.
GR (GAPI)		DPHI	2.71
0.0	200.00	.30000	-.

FILE 6 3 12-JUL

ATTACHMENT III

Cave Canyon Waterflood Lease
Project

5" / 100"

CNL
FDC

15 MAY

5700

UPPER 15 MIN

22

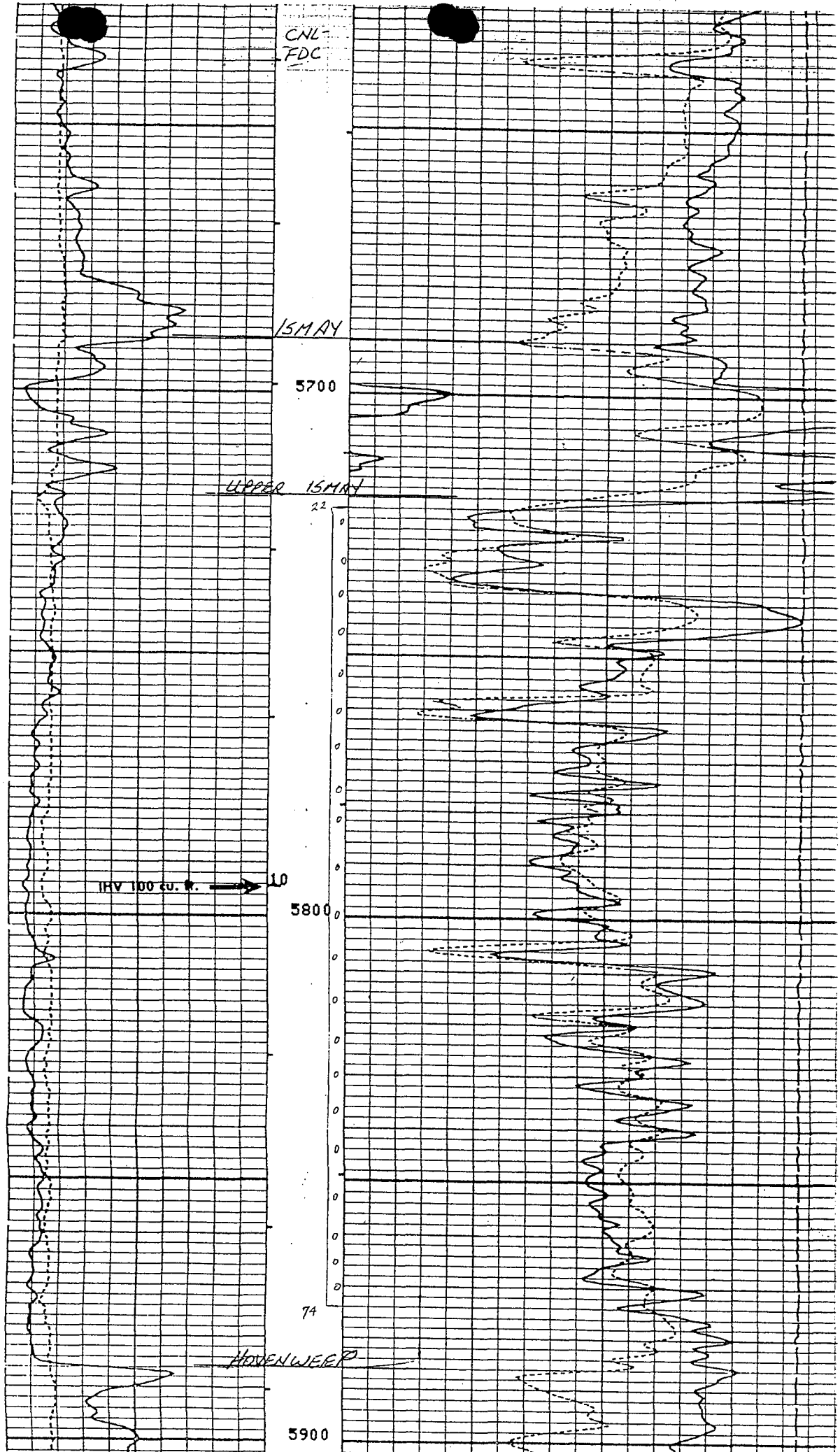
IHV 100 cu. ft. → 10

5800

74

HOVENWEER

5900



YATES

CCP 1-33

2.71
WELLS 61

17.4
CCP 4-3

13.84
CCP 3-1

22.95
CCP 3-3

2.78
CCP 3-2

MANCAN

Cave Canyon Field
Hydrocarbon Pore Volume map
 ϕh_{50}

DUNCAN OIL, INC.

PENTHOUSE ONE

1777 SOUTH HARRISON STREET

DENVER, COLORADO 80210

TELEPHONE (303) 759-3303

November 18, 1988

Yates Petroleum Corporation
105 S. 4th Street
Artesia, NM 88210

Marathon Oil Company
Box 2690
Cody, WY 82414

Attn: Mike Slater
c/o Yates Petroleum -
S.P. Yates
John A. Yates
ABO Petro Corporation
Myco Industries Inc.
Yates Drilling Company
Estate of Martin Yates III
Weed Oil & Gas
Lillie M. Yates
Frank W. Yates Jr.
Shari Yates Brewer
Darin Yates

Chorney Oil Company
555 17th St., Ste. 1000
Denver, CO 80202-3910

TXP Operating Company
1700 Lincoln, Suite 2100
Denver, CO 80203

RE: Cave Canyon Unitization
San Juan County, UT

Dear Mr. Slater:

This letter is written to inform you of our plans for the Cave Canyon field. A reservoir engineering consultant is beginning to study the Cave Canyon Field for potential secondary recovery. The study and unitization plan will hopefully be presented to the State of Utah by February, 1989. We are proceeding with the study at our expense since sections 3 and 4 are controlled by the Duncan/Comdisco group.

I have attached four exhibits which leads us to the conclusion that the main Cave Canyon Ismay reservoir is located only in sections 3 and 4. Exhibit 1 is a structure map showing the existing wells in the area. The structure is long and narrow which is similar to the Kiva and Tincup Fields. The Cave Canyon structure appears to connect in sections 4 and 33, but I will show that other data suggests that there are two separate reservoirs.

A cross section is included which shows the correlation between the Yates 1-33 well in the SW/SE section 33 and the Duncan Wells #1 well in the NE/NE of section 4. These two wells are 1850' apart. The Wells #1 is on the NE edge of the Ismay porosity interval. The cross section shows that the Yates well and the Wells #1 are not perforated in the same intervals. The limestone porosity interval that is perforated in the Yates well is not

porous in the Wells #1. The possibility of the limestone porosity interval extending to the main reservoir west of the Wells #1 does not exist because of the pressure information to be discussed later.

The drill stem test and logs from the Yates 1-33 well indicated that the upper Ismay carbonate is tight. The Wells #1 is on the northern and tighter edge of the field. We base this on the dipmeter, the quality of the dolomite pay section and the lack of limestone porosity. The pressure-production information on the Wells #1 indicates the rock is tighter, but the well is connected based on the producing GOR data and the fact that the well more closely matches the main reservoir pressure data. We believe the main Cave Canyon Field does not extend to the north of the Wells well because the Upper Ismay carbonate (dolomite) gets tighter and the main reservoir limestone is truncated.

Pressure and production information indicate that the Yates 1-33 well is not in communication with either the Wells #1 well or the main body of the reservoir. Our production records on the Wells #1 and the Cave Canyon 3-1 well show GORs beginning in the 600 SCF/barrel range and have increased slowly to GORs of 2,000 SCF/barrel. The Wells #1 currently has a cumulative GOR of 1270 while the Cave Canyon 3-1 well is 1145. The Wells #1 was produced about a year and a half before the Yates well was drilled and the Cave Canyon 3-1 well was put on production a year before the Yates well which suggests that these well GORs should be higher than the Yates well. The opposite is true however. The Yates 1-33 well shows a starting GOR of around 3500 and currently about 4600. The cumulative GOR is 2800 SCF/barrel. This data leads me to the conclusion that the Yates well is in a different reservoir from the main Cave Canyon Field.

The most convincing evidence that the Yates well is not connected to the main reservoir, however, is the reservoir pressure information that has been obtained since 1984. Shown on the last exhibit is the pressure versus time information gathered by Duncan and Yates. The Yates well information was sent to us in March, 1987 by Jim Brown. All the pressures have been corrected to a datum of -460 in psia. The pressure data indicates that the original reservoir pressure was about 2100 psi. The pressure calculated in the Yates well when it was drill stem tested in the Upper Ismay Carbonate (dolomite) was 2070 psi. A bottom hole pressure buildup was run shortly after the Yates well was perforated in the limestone interval in October, 1986 indicating 2040 psi. There had been 370,000 BO produced from the field by October, 1986; therefore, the Yates well should have seen a reservoir pressure of 1800 psi if the well (dolomite or limestone) was connected to the main body of the reservoir.

Another bottom hole pressure buildup was run on the Yates 1-33 well in February, 1987. The bottom hole pressure after 73 hours built up to 564 psig indicating a very tight formation. Using the Horner method of extrapolation as we did with all the other pressure information in the field, the Yates 1-33 data extrapolated to a reservoir pressure of 1100

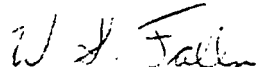
Yates Petroleum Corporation
November 18, 1988
Page 3

psia. This pressure was 600 psia below the reservoir pressure in the main part of the field at the same time. Our conclusion from the pressure information is that the Yates well is in a small limited reservoir that is rapidly depleting. This also explains why the GOR is increasing more rapidly than we see in the Wells #1 and Cave Canyon 3-1 well.

The last exhibit is a hydrocarbon pore volume ($\phi h S_o$) map which utilizes the structure map, well performance, and pressure information to map the oil-in-place in the Cave Canyon Field only in sections 3 and 4. We're still working with the logs and core data to determine cutoffs. I don't believe that the $\phi h S_o$ values shown on the wells will vary too much.

Hopefully, I have explained why the Yates 1-33 well is separated from the main body of the Cave Canyon Field. If you have any further pressure information on the Yates 1-33 well since the February, 1987 buildup, I would appreciate receiving the information. Let me know if you have any questions about this letter.

Sincerely,



W. S. Fallin
Production Manager

WSF/bv

bcc: Northstar Energy Company,
Peter Hummel
~~TXP Operating Company~~

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0115
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Central Battery		DEC 12 1988	
2. NAME OF OPERATOR Raymond T. Duncan		DIVISION OF OIL, GAS & MINING	
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH-1, Denver, CO 80210		8. FARM OR LEASE NAME Cave Canyon Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NE SW		9. WELL NO. Central Battery	
14. PERMIT NO. N/A		15. ELEVATIONS (Show whether DF, RT, GR, etc.) N/A	
12. COUNTY OR PARISH San Juan		13. STATE UT	

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Operations <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

LACT Unit has been installed on the main battery. LACT was proved and put into operation on December 2, 1988. Proving was witnessed by Mike Wade of the BLM. Updated site security diagram will be sent.

18. I hereby certify that the foregoing is true and correct

SIGNED

J. A. Bettridge

TITLE

Operations Superintendent

DATE

Dec. 9, 1988

(This space for Federal or State police use)

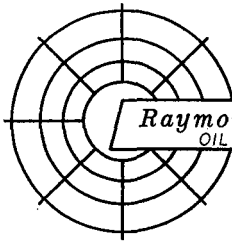
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



Raymond T. Duncan
OIL PROPERTIES

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

RECEIVED
DEC 12 1988

DIVISION OF
OIL, GAS & MINING

December 9, 1988

Bureau of Land Management
P. O. Box 970
Moab, Utah 84532

Re: Cave Canyon Batttery
T38S-R24E
San Juan Co., Utah

Gentlemen:

Enclosed is the sundry notice regarding the installation of a IACT
Unit on the above captioned battery.

Please contact me if you have any questions or need additional
information.

Very truly yours,

RAYMOND T. DUNCAN

J. A. Betteridge

J. A. Betteridge
Operations Superintendent

JAB:nr
Enclosures

APPLICATION FOR INJECTION WELL

Operator: Raymond T. Duncan Telephone: (303) 759-3303

Address: 1777 S. Harrison St., P-1

City: Denver State: CO Zip: 80210

Well no.: Cave Canyon Federal #3-1 Field or Unit name: Cave Canyon

Sec.: 3 Twp.: 38S Rng.: 24E County: San Juan Lease no. U-47876

	<u>YES</u>	<u>NO</u>
Is this application for expansion of an existing project?.....	_____	<u>X</u>
Will the proposed well be used for: Enhanced recovery?.....	<u>X</u>	_____
Disposal?.....	_____	_____
Storage?.....	_____	_____
Is this application for a new well to be drilled?.....	_____	<u>X</u>
Has a casing test been performed for an existing well?.....	_____	<u>X</u>
(If yes, date of test: _____)		

Injection Interval: from 5735' to 5872'

Maximum Injection: rate 4000 (est) pressure 2500 psig

Injection zone contains X oil, X gas or _____ fresh water within 1/2 mile.

Additional information as required by R615-5-2 should accompany this form.

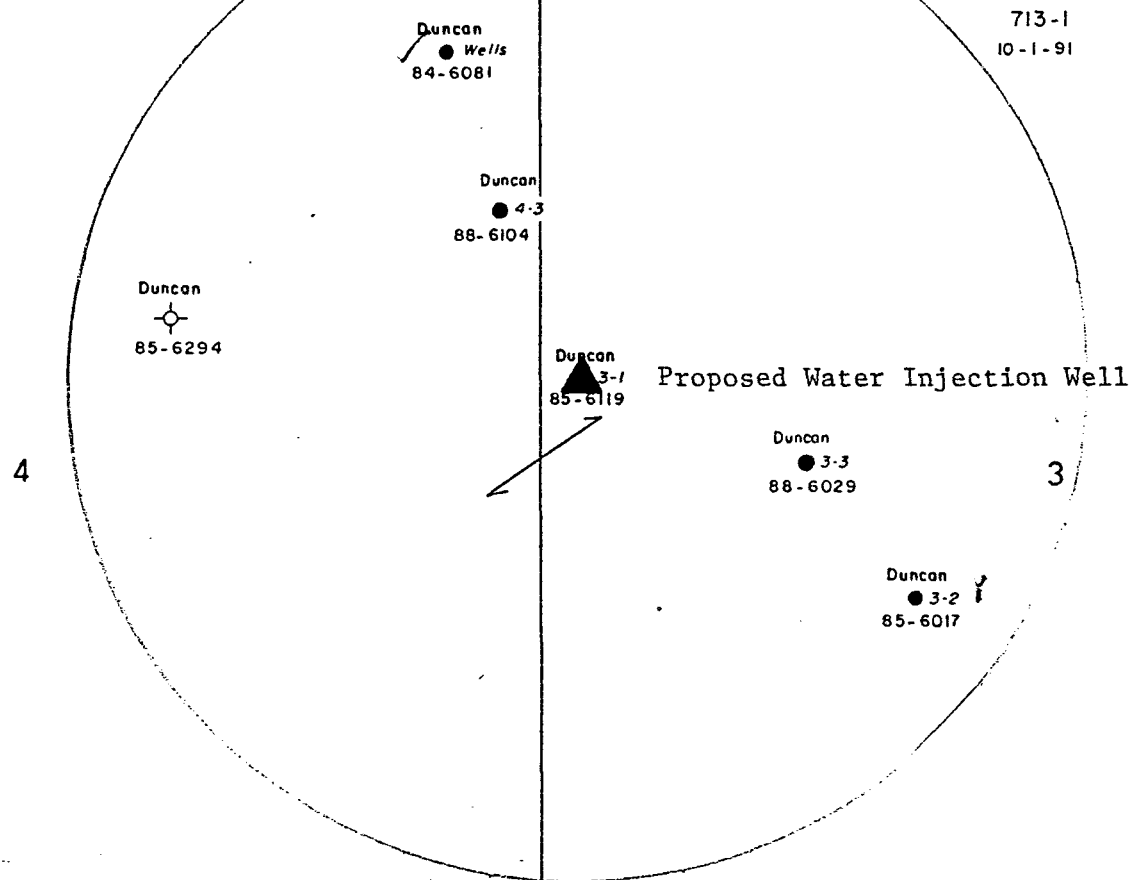
I hereby certify that the foregoing is true and correct to the best of my knowledge:

Signed: John A. Bettridge Title: Operations Superintendent Date: 2-22-89

(This space for DOGM approval)

Approved by: _____ Title: _____ Date: _____

Yates
● 33-1
86-6091



ABO
86-6000

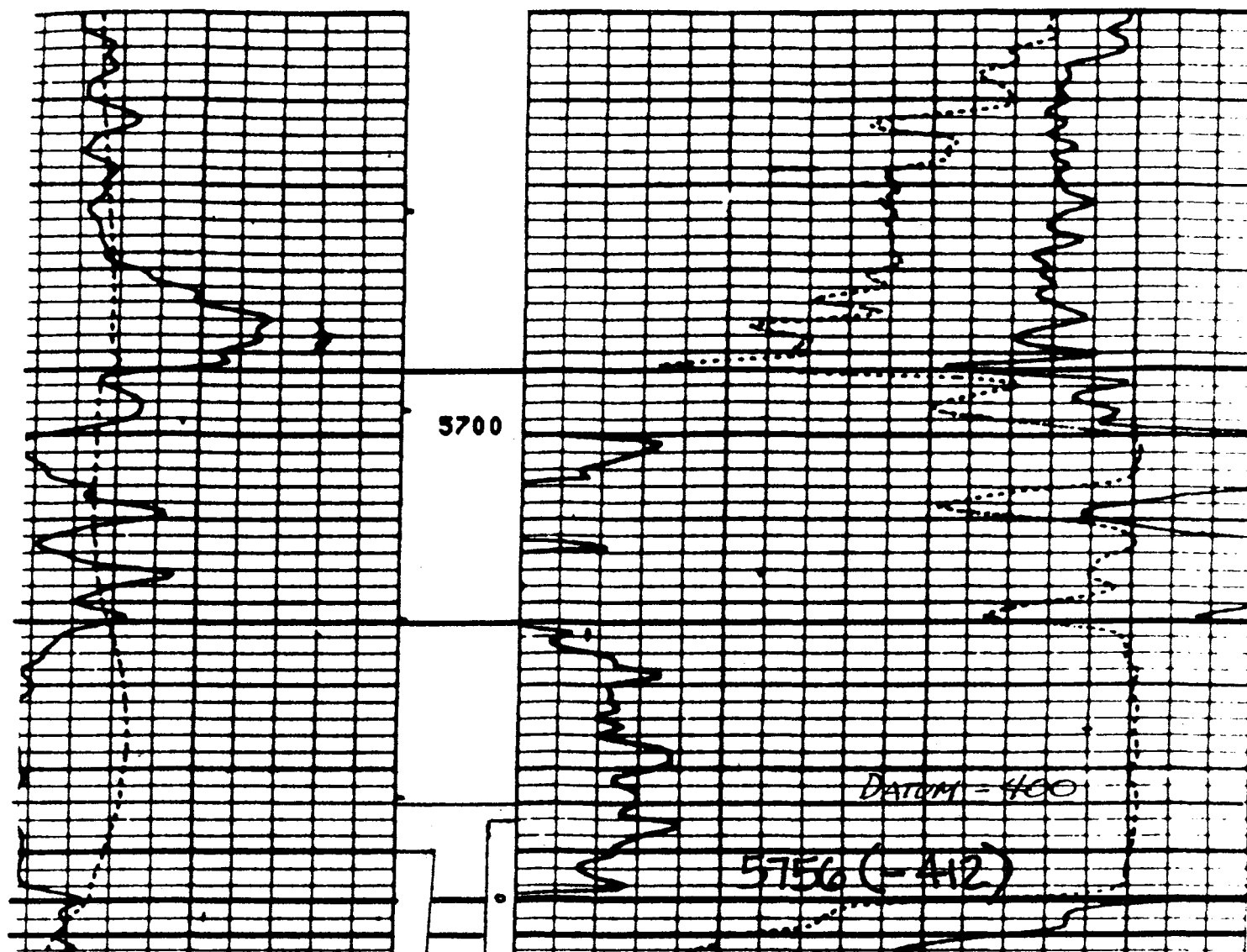
Duncan

ATTACHMENT I

Cave Canyon Waterflood Lease
Project

DUNCAN WELLS FED. 1-4

NE-NE 4-38S-24E

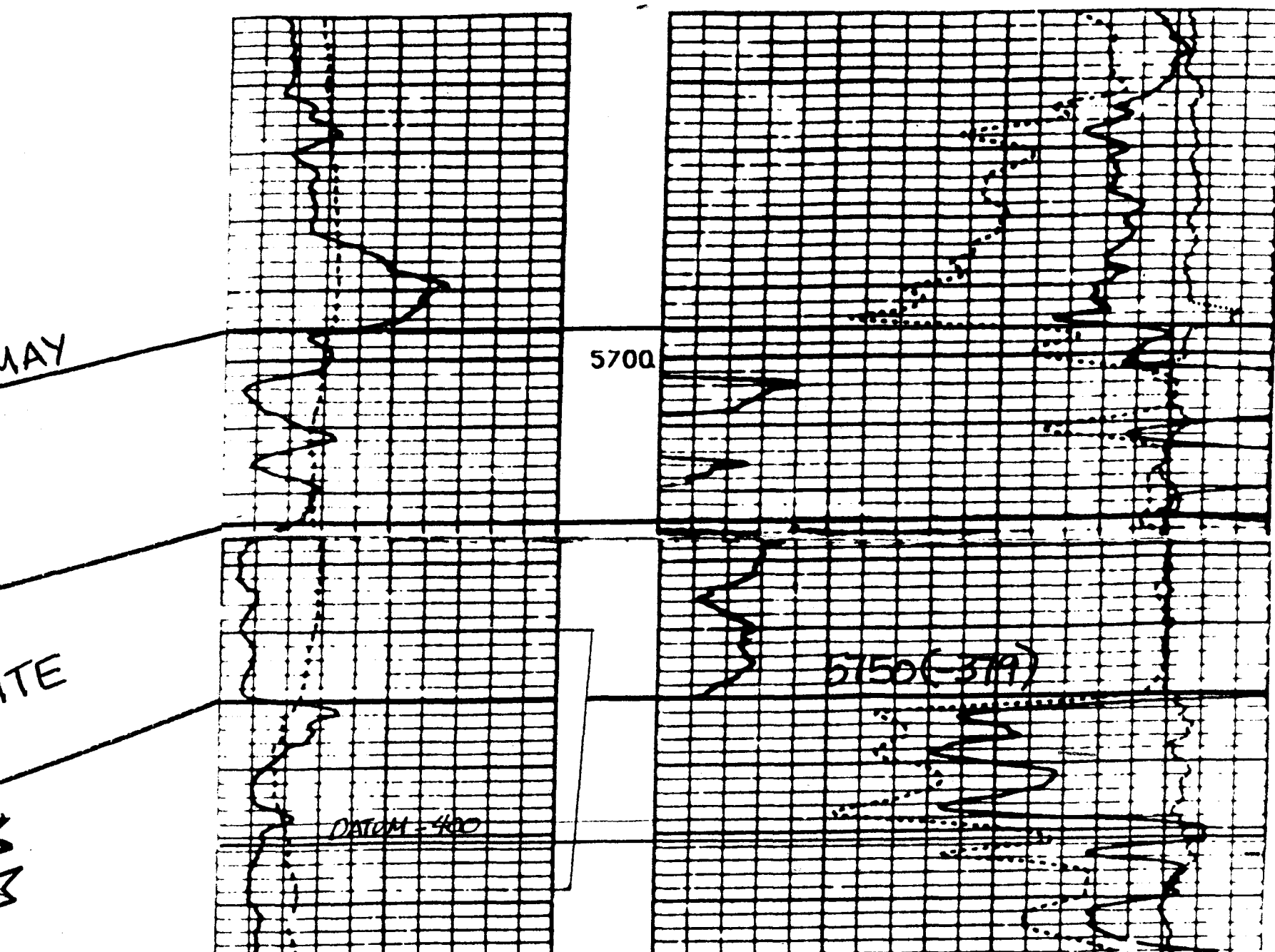


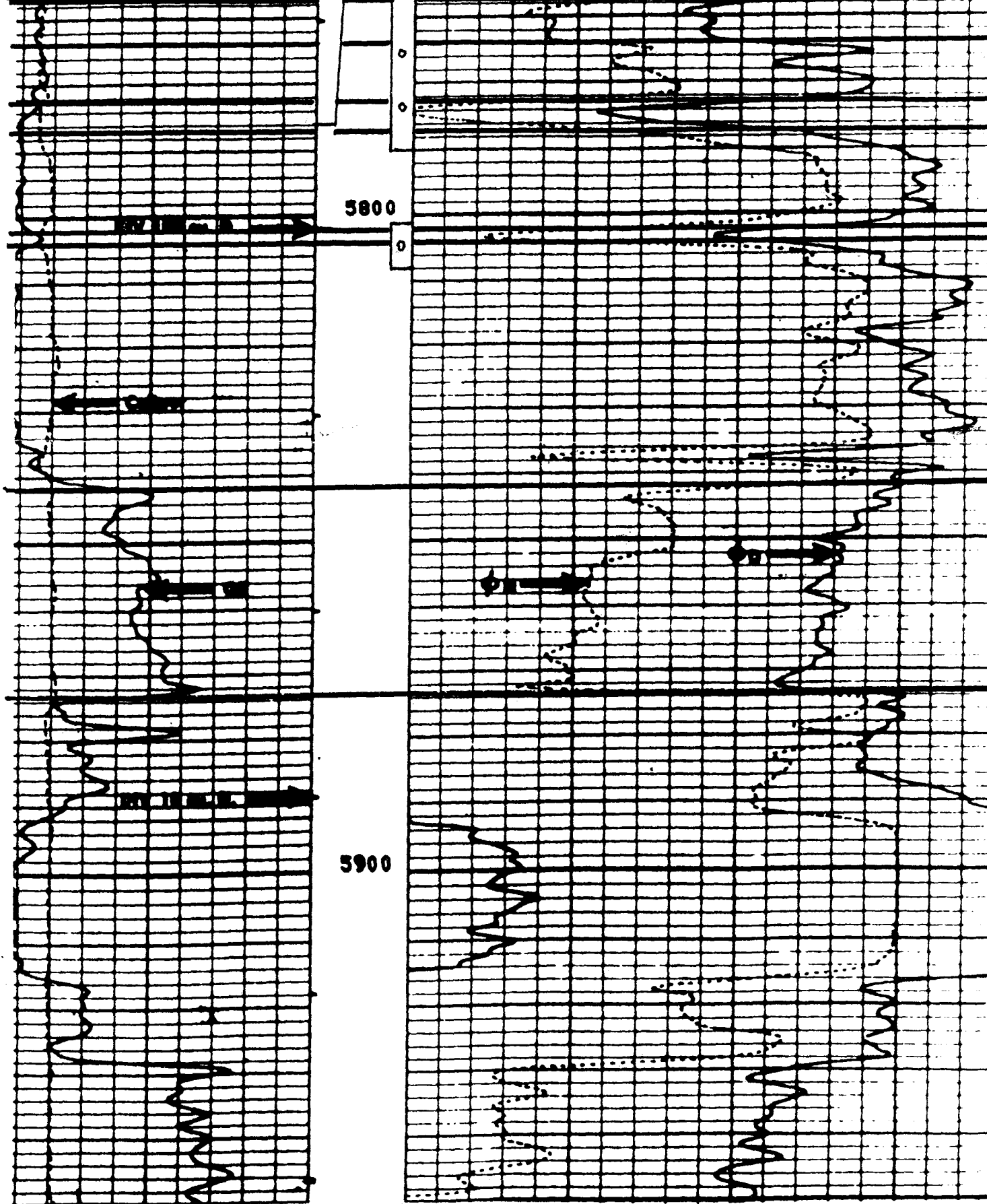
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YATES CAVE CANYON 1-33
SW-SE 33-37S-24E





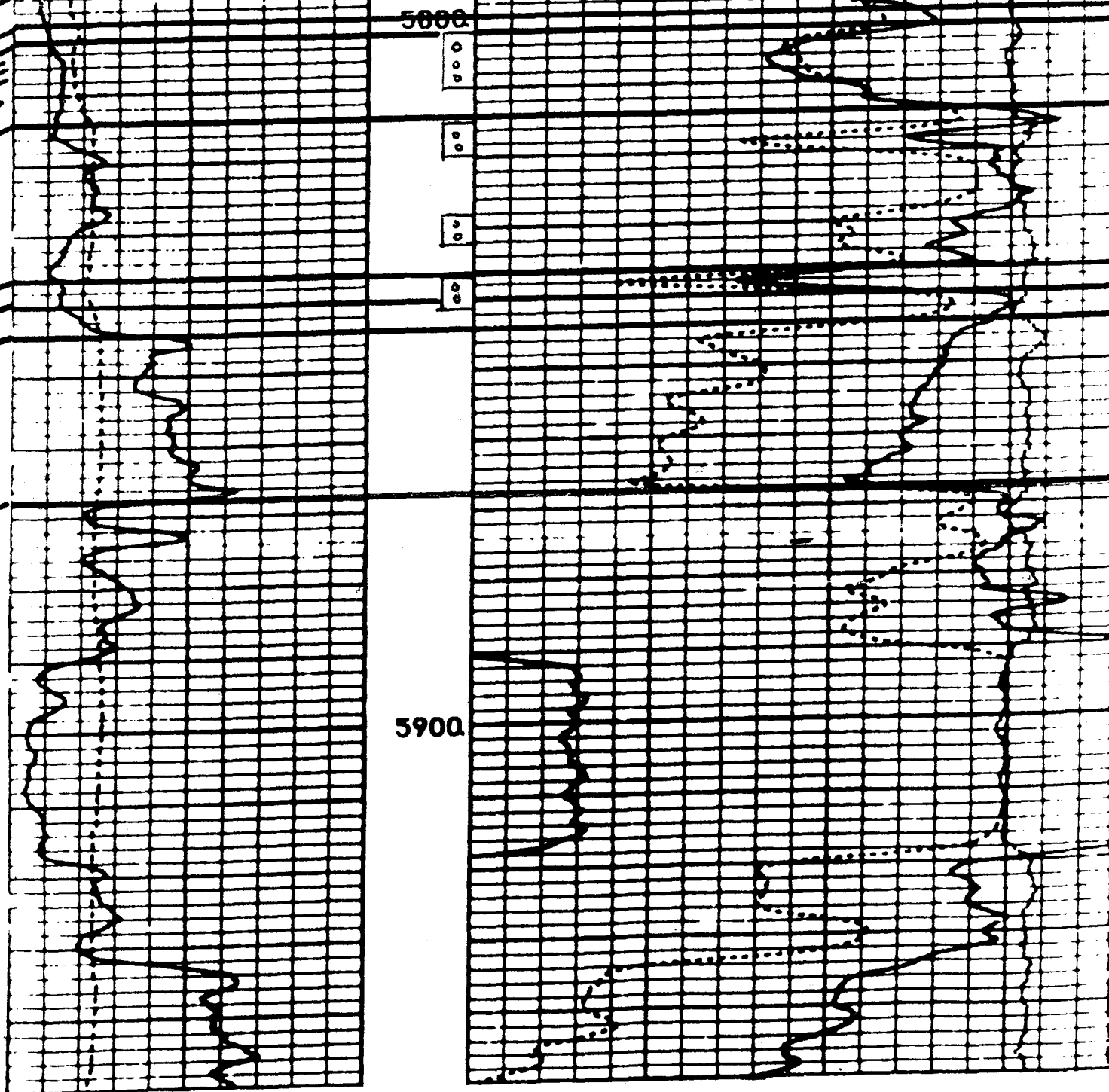
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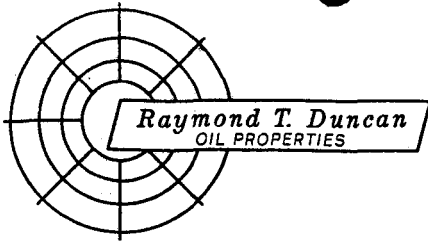
5800

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POROSITY

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5900





RECEIVED

FEB 23 1989

NOT RECORDED

1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

February 23, 1989

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Ste 350
Salt Lake City, UT 84180-1203

Re: Application for Injection
Rule R615-5-1
Cave Canyon Waterflood Lease Project
Sec. 3 & 4-T38S-R24E
San Juan County, UT

Gentlemen:

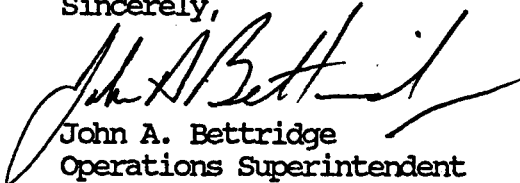
Enclosed for your approval is Raymond T. Duncan's Application for Injection as required by Rule R615-5-1 of the Oil and Gas Conservation Rules for the state of Utah. Duncan proposes to inject water into the Ismay formation in Cave Canyon Waterflood Lease Project located in Sec. 3 & 4-T38S-R24E, San Juan County, Utah. The required information is as follows:

- 2.1: The operator of this project will be Raymond T. Duncan, 1777 S. Harrison Street, P-1, Denver, CO 80210.
- 2.2: Please see Attachment I for a plat of all wells within a one-half mile radius of the proposed project.
- 2.3: Duncan proposes to establish a waterflood lease project in Sec. 3 & 4 of T38S-R24E. The waterflood project will consist of four producing wells, one injection well, and one water source well. The names, locations and perforations are included as Attachment II. Oil production will be gathered at the central tank battery located beside the site of the Cave Canyon #3-2. Duncan proposes to convert the Cave Canyon #3-1 to water injection. Injection rates will be a maximum of 4000 BWPD at 2500 psi. Injection water will be produced from the Shinarump and Cutler formations at a gross interval of 2740'-3100' from the Cave Canyon Federal #4-2 well located SW NE Sec. 4, T38S, R24E. Water will be transported by a 4" line from the water source well to the injection plant then to the #3-1 well site.
- 2.4: The wells in the proposed waterflood project produce from the Upper Ismay formation at an average depth of 5800'. The Upper Ismay is an algal mound facies of the Middle Pennsylvanian age. Please reference Attachment II for the perforations in each well.
- 2.5: Water will be injected into the Upper Ismay Formation in the Cave Canyon Federal #3-1 well at a depth of 5735'-5872'.

- 2.6: A copy of the CNL/FDC-GR log for the Cave Canyon Federal #4-3 is attached (Attachment III). This log is representative of the other wells in the Cave Canyon Field.
- 2.7: The proposed injection fluid is water to be produced from the Shinarump and Cutler formations of the water source well. Injection rates will be a maximum of 4000 BWPD at 2500 psi. The average injection rate is estimated to be 3000 BWPD.
- 2.8: Please see Attachment IV for a list of all owners within a one-half mile radius of the proposed waterflood lease project.
- 2.9 Attachment V is an affidavit of notification of all owners within the one-half mile radius of this project.

Should you need further information to approve this application, please contact me at (303) 759-3303.

Sincerely,



John A. Bettridge
Operations Superintendent

KDB
encl.

ATTACHMENT II

Well & Location

Perforations

Cave Canyon Federal #3-2 - Producer
1925' FSL & 1925' FWL
NE SW Sec. 3-T38S-R24E
San Juan County, Utah

5690-5702'
5718-5758'
5764-5769'

Cave Canyon Federal #3-3 - Producer
2365' FNL & 1390' FWL
SE NW Sec. 3-T38S-R24E
San Juan County, Utah

5662-5774'

Wells Federal No. 1 - Producer
500' FNL & 500' FEL
NE NE Sec. 4-T38S-R24E
San Juan County, Utah

6017-6031'
5757-5790'
5801-5806'

Cave Canyon Federal #4-3 - Producer
1310' FNL & 200' FEL
NE NE Sec. 4-T38S-R24E
San Juan County, Utah

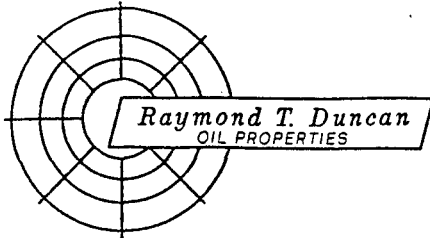
5722-5874'

Cave Canyon Federal #3-1 - Proposed WIW
2140' FNL & 200' FWL
SW NW Sec. 3-T38S-R24E
San Juan County, Utah

5735-5872'

Cave Canyon Federal #4-2 - Proposed WSW
1820' FNL & 1860' FEL
SW NE Sec. 4-T38S-R24E
San Juan County, Utah

Shinarump & Cutler
Proposed Perfs:
2740-2770'
2790-2820'
3020-3050'
3070-3100'



1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

February 23, 1989

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203

Re: Request for approval of a
Class II injection well
Cave Canyon Lease Waterflood Project
Sections 3 & 4-T38S-R24E
San Juan County, UT

Gentlemen:

Enclosed for your approval is Raymond T. Duncan's Application for Approval of a Class II Water Injection Well at the Cave Canyon Waterflood Lease Project. Duncan proposes to convert the Cave Canyon Federal #3-1 located in the SW NW of Sec. 3, T38S, R24E, San Juan County, Utah, to water injection. Water injection will increase the ultimate oil recovery of Cave Canyon Field. A completed Form DOGM-UIC-1 is attached and the information required by Rule R615-5-2 of the state of Utah Rules of Oil and Gas Conservation follows:

- 2.1: Please see Attachment I for a plat showing the location of the proposed injection well.
- 2.2: Copies of the logs run on the Cave Canyon Federal #3-1 are on file with the state.
- 2.3: A copy of the cement bond log is on file with the state.
- 2.5: Casing was set in the Cave Canyon Federal #3-1 as follows:

Surface Casing: Ran 44 jts 8-5/8" 24# J-55 STC csg, set @ 1900'. Cemented w/875 sx BJ Lite, tailed in w/200 sx Class B w/2% CaCl₂. Filled from top w/130 sx Class B w/3% CaCl₂.

Production Casing: Ran 164 jts. 5-1/2" 15.5# K-55 LTC csg, set @ 6119'. Cemented w/400 sx Class B w/ 5#/sx salt & .75% D-31. Top of cement @ 5300'.

The casing in this well will be pressure tested to 2500 psi before starting injection into the Ismay Formation.

Injection Application

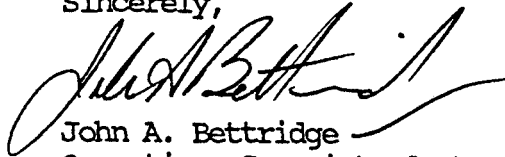
Page Two

- 2.6: Water to be used for injection will be produced from the Shinarump and Cutler formations in the Cave Canyon #4-2 well located in the SW NE Sec. 4, T38S, R24E. Duncan will re-enter this well and complete it as a water source well. Maximum daily injection at the #3-1 will be 4000 BW and average daily injection is estimated at 3000 BW.
- 2.7: Duncan will re-enter the #4-2 well and complete it in the Shinarump and Cutler formations as a water source well. As soon as this work has been completed, a complete water analysis will be done and the results submitted to your office. The above formations are the same source for injection water as is used at both the Kiva (Sec. 4, 5, & 9, T39S, R23E) and Kachina Waterfloods (Sec. 24, T38S, R23E & Sec. 19, T38S, R24E).
- 2.8: The maximum injection pressure will be 3100 psi while the average injection pressure is estimated at 2500 psi.
- 2.9: After the Cave Canyon Federal #3-1 has been placed on injection and the injection rate has stabilized, a step rate test will be run to determine the fracture gradient in the area. The results of the test will be submitted to your office as early as possible.
- 2.10: Water injection at the Cave Canyon Waterflood Project will be into the Upper Ismay Formation at a depth of 5735-5872'. The Upper Ismay is an algal mound facies of the Pennsylvanian Age. The reservoir is a stratigraphic trap, trending northwest-southeast, formed by a lithologic change within the Ismay from a limestone and dolomite reservoir facies to a thick off mound anhydrite facies. The trap is approximately one to one and one-quarter miles long and one-half mile wide. The gross thickness of the Upper Ismay at Cave Canyon is 153' in the #3-1. This well is believed to be located off the crest of the mound, indicating the gross thickness may be greater than 153'. The average depth of the Upper Ismay in the Cave Canyon area is 5800'.
- 2.11: There are five wells in the Cave Canyon Waterflood Lease Project which penetrate the Ismay reservoir. Five and one-half inch production casing was set in each of these wells and cemented in place with 400 sx of Class B cement. This amount of cement should insure the the Ismay zone is mechanically isolated from any possible migration outside of the casing string.
- 2.12: Attachment II is an affidavit certifying that this application has been provided to all operators, owners, and surface owners within a one-half mile radius of the Cave Canyon Federal #3-1.

Injection Application
Page Three

Should you have questions or need further information, please contact me
at (303)759-3303.

Sincerely,

A handwritten signature in cursive script, appearing to read "John A. Bettridge".

John A. Bettridge
Operations Superintendent

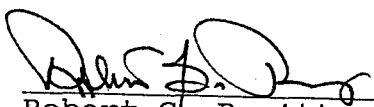
KDB
encl.

BEFORE THE
BOARD OF OIL, GAS AND MINING
FOR THE STATE OF UTAH

IN THE MATTER OF THE PETITION)	
OF RAYMOND T. DUNCAN FOR APPROVAL)	
OF A WATER FLOOD SECONDARY)	AFFIDAVIT OF MAILING
RECOVERY PROJECT AND SIMULTANEOUS)	
HEARING OF A CLASS II INJECTION)	Docket No. 89-005
WELL APPLICATION, IN THE CAVE)	
CANYON FIELD, SAN JUAN COUNTY,)	Cause No. 217-1
UTAH.)	

STATE OF UTAH)
)
) .ss
COUNTY OF SALT LAKE)

The undersigned hereby certifies that copies of the Application for Water Flood Project and Application for Class II Injection Well, together with a Motion for Expedited Hearing, was mailed postage prepaid, certified mail - R.R.R., this 27th day of February 1989, to all operators, owners and surface owners within one half ($\frac{1}{2}$) mile of the Water Flood Project and the Class II Injection Well as required by Rule 501(b)(a). A list of the names and addresses is attached hereto.


Robert G. Pruitt, Jr.
Attorney for Raymond T. Duncan
PRUITT, GUSHEE & FLETCHER
1850 Beneficial Life Tower
Salt Lake City, Utah 84111
Telephone: (801) 531-8446

On this 27th day of February 1989, personally appeared before me, Robert G. Pruitt, Jr., the signer of the above instrument, who being first duly sworn acknowledged to me that he executed the same.

NOTARY PUBLIC

My Commission Expires:

Residing at:

ATTACHMENT IV

Owners and Surface Owners Within One-Half Mile Radius of Sec. 3 & 4

Joan Chorney
c/o Chorney Oil Company
555 17th Street, Suite 1000
Denver, CO 80202-3910

TXP Operating Company
1700 Lincoln Street, Suite 2100
Denver, CO 80203


Marathon Oil Company
Box 120
Casper, WY 82602

Yates Petroleum Corporation
S. P. Yates
ABO Petroleum Corp.
John A. Yates
Myco Industries, Inc.
Yates Drilling Co.
Weed Oil & Gas
Estate of Martin Yates, III
Lillie M. Yates
Frank W. Yates, Jr.
Darin Yates
Shari Yates Brewer
105 S. 4th Street
Artesia, NM 88210

Duncan Exploration Company
Duncan Enterprises, Inc.
Synergy Exploration Company
Raymond T. Duncan
J. Walter Duncan, Jr.
Club Oil & Gas, Ltd.
Comdisco Exploration, Inc.
1777 S. Harrison Street, P-1
Denver, CO 80210

Wintershall Corporation
5251 DTC Parkway, Suite 500
Englewood, CO 80111-2734

Santa Fe Energy Company
Santa Fe Energy
Operating Partners L.P.
One W. 3rd Street, Suite 500
Tulsa, OK 74103



Hartwell Corp. 83
5941 S. Middlefield Road, #103
Littleton, CO 80123

Northstar Energy Company, L.P.
P. O. Box 10350
Reno, NV 89510

Maurice W. Brown
614 S. Greeley Hwy.
Cheyenne, WY 82007

Meridian Oil, Inc
5613 DTC Parkway
Englewood, CO 80111

BWAB 84-86 Joint Venture
1801 California
Denver, CO 80202

Peggy A. Yates
405 S. 4th Street
Artesia, NM 88210

State of Utah
Division of State Lands
89 E. Center Street
Moab, UT 84532
Attn: Mr. Stan Baker

Bureau of Land Management
Utah State Office
324 S. State, #301
Salt Lake City, Utah 84111-2302
Attn: Theresa Thompson

Raymond Chorney
555 17th Street, #1000
Denver, CO 80202

Marathon Oil Co.
P. O. Box 3128
Houston, TX 77253

SHB Oil & Gas Company
300 Pike Street
Cincinnati, Ohio 45202

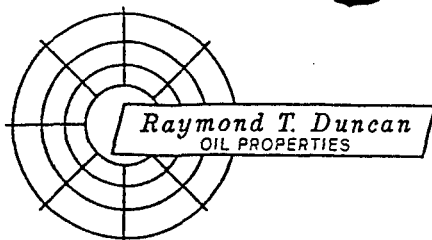
Transco 1980 Expl. Ltd.
Transco 1981 Expl. Ltd.
P. O. Box 4511
Houston, TX 77210

EP Operating Co.
P. O. Box 2649
Dallas, TX 75221

Corbin J. Robertson
c/o Quintana Petroleum Corporation
1050 17th Street, Suite 400
Denver, CO 80265

Corbin J. Robertson
Sohio Petroleum Company
c/o Quintana Petroleum Corporation
1050 17th Street, Suite 400
Denver, CO 80265

Bob



RECEIVED

FEB 23 1989

STATE OF UTAH

1777 SOUTH HARRISON STREET-PENTHOUSE ONE
TELEPHONE (303) 759-3303-DENVER, COLORADO 80210

February 23, 1989

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Ste 350
Salt Lake City, UT 84180-1203

Re: Application for Injection
Rule R615-5-1
Cave Canyon Waterflood Lease Project
Sec. 3 & 4-T38S-R24E
San Juan County, UT

Gentlemen:

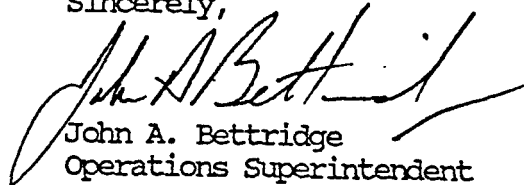
Enclosed for your approval is Raymond T. Duncan's Application for Injection as required by Rule R615-5-1 of the Oil and Gas Conservation Rules for the state of Utah. Duncan proposes to inject water into the Ismay formation in Cave Canyon Waterflood Lease Project located in Sec. 3 & 4-T38S-R24E, San Juan County, Utah. The required information is as follows:

- 2.1: The operator of this project will be Raymond T. Duncan, 1777 S. Harrison Street, P-1, Denver, CO 80210.
- 2.2: Please see Attachment I for a plat of all wells within a one-half mile radius of the proposed project.
- 2.3: Duncan proposes to establish a waterflood lease project in Sec. 3 & 4 of T38S-R24E. The waterflood project will consist of four producing wells, one injection well, and one water source well. The names, locations and perforations are included as Attachment II. Oil production will be gathered at the central tank battery located beside the site of the Cave Canyon #3-2. Duncan proposes to convert the Cave Canyon #3-1 to water injection. Injection rates will be a maximum of 4000 BWPD at 2500 psi. Injection water will be produced from the Shinarump and Cutler formations at a gross interval of 2740'-3100' from the Cave Canyon Federal #4-2 well located SW NE Sec. 4, T38S, R24E. Water will be transported by a 4" line from the water source well to the injection plant then to the #3-1 well site.
- 2.4: The wells in the proposed waterflood project produce from the Upper Ismay formation at an average depth of 5800'. The Upper Ismay is an algal mound facies of the Middle Pennsylvanian age. Please reference Attachment II for the perforations in each well.
- 2.5: Water will be injected into the Upper Ismay Formation in the Cave Canyon Federal #3-1 well at a depth of 5735'-5872'.

- 2.6: A copy of the CNL/FDC-GR log for the Cave Canyon Federal #4-3 is attached (Attachment III). This log is representative of the other wells in the Cave Canyon Field.
- 2.7: The proposed injection fluid is water to be produced from the Shinarump and Cutler formations of the water source well. Injection rates will be a maximum of 4000 BWPD at 2500 psi. The average injection rate is estimated to be 3000 BWPD.
- 2.8: Please see Attachment IV for a list of all owners within a one-half mile radius of the proposed waterflood lease project.
- 2.9 Attachment V is an affidavit of notification of all owners within the one-half mile radius of this project.

Should you need further information to approve this application, please contact me at (303) 759-3303.

Sincerely,



John A. Bettridge
Operations Superintendent

KDB
encl.

ATTACHMENT II

Well & Location

Perforations

Cave Canyon Federal #3-2 - Producer
1925' FSL & 1925' FWL
NE SW Sec. 3-T38S-R24E
San Juan County, Utah

5690-5702'
5718-5758'
5764-5769'

Cave Canyon Federal #3-3 - Producer
2365' FNL & 1390' FWL
SE NW Sec. 3-T38S-R24E
San Juan County, Utah

5662-5774'

Wells Federal No. 1 - Producer
500' FNL & 500' FEL
NE NE Sec. 4-T38S-R24E
San Juan County, Utah

6017-6031'
5757-5790'
5801-5806'

Cave Canyon Federal #4-3 - Producer
1310' FNL & 200' FEL
NE NE Sec. 4-T38S-R24E
San Juan County, Utah

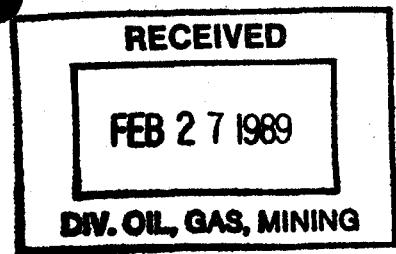
5722-5874'

Cave Canyon Federal #3-1 - Proposed WIW
2140' FNL & 200' FWL
SW NW Sec. 3-T38S-R24E
San Juan County, Utah

5735-5872'

Cave Canyon Federal #4-2 - Proposed WSW
1820' FNL & 1860' FEL
SW NE Sec. 4-T38S-R24E
San Juan County, Utah

Shinarump & Cutler
Proposed Perfs:
2740-2770'
2790-2820'
3020-3050'
3070-3100'



BEFORE THE
BOARD OF OIL, GAS AND MINING
FOR THE STATE OF UTAH

IN THE MATTER OF THE PETITION
OF RAYMOND T. DUNCAN FOR APPROVAL
OF A WATER FLOOD SECONDARY
RECOVERY PROJECT AND SIMULTANEOUS
HEARING OF A CLASS II INJECTION
WELL APPLICATION, IN THE CAVE
CANYON FIELD, SAN JUAN COUNTY,
UTAH.

)
)
) MOTION FOR EXPEDITED HEARING
) and
) MEMORANDUM IN SUPPORT

)
) 89-005
) 217-1
)
)
)

THE UNDERSIGNED, attorney for Raymond T. Duncan, of Denver, Colorado, hereby moves the Board of Oil, Gas and Mining for authorization to hear the Application for the Cave Canyon Water Flood Project at the Board's regularly scheduled meeting in Room 350, 3 Triad Center, 355 W. North Temple St., Salt Lake City, Utah, commencing at 10:00 a.m. on March 23, 1989, and to waive the routine notice requirements pertaining thereto. Further, the undersigned moves the Board to simultaneously schedule any hearing which may be required as a result of any protest received by the Board or Division pursuant to Raymond T. Duncan's Request for Approval for a Class II Injection Well in the Cave Canyon Field.

REASONS IN SUPPORT OF MOTION

Applicant submits that the need to commence the water flood project, which is intended to maintain reservoir pressures, is urgent and requires the earliest hearing and approval of the Application. If any protest to the proposed injection well is

received, it is imperative that such protest be heard and acted upon simultaneously with the Board's decision to authorize the water flood project.

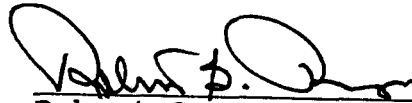
The proposed water flood project, and the proposed underground injection well, will not affect lands or parties outside of the boundaries of Federal Oil and Gas Lease U-47876, nor affect formations other than the designated zone in the Ismay formation, as described in the respective Applications.

The Procedural Rules of the Utah Board of Oil, Gas and Mining authorize waiver of the routine notice requirements for reasonable cause shown, and permit an expedited hearing and authorization of matters under the proper jurisdiction of the Board.

Copies of the respective Applications, and this Motion, have been mailed to every party requiring notice according to the applicable statutes and rules. An Affidavit of Mailing, with a list of the addresses to which copies were mailed, is submitted herewith.

Applicant requests an early decision authorizing the scheduling of these combined hearings on March 23, 1989, and waiver of the notice requirements. Please notify the undersigned.

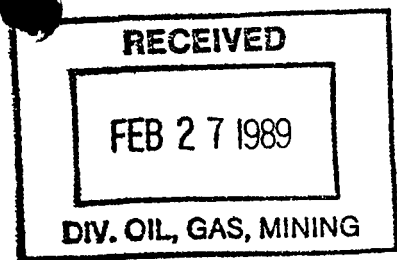
Dated this 24th day of February, 1989.



Robert G. Pruitt, Jr.
PRUITT, GUSHEE & FLETCHER
Attorneys for Raymond T. Duncan
1850 Beneficial Life Tower
Salt Lake City, Utah 84111
Telephone: (801) 531-8446

Address of Applicant:

Raymond T. Duncan
1777 So. Harrison St.- Penthouse One
Denver, Colorado 80210
Telephone: (303) 759-3303



BEFORE THE
BOARD OF OIL, GAS AND MINING
FOR THE STATE OF UTAH

IN THE MATTER OF THE PETITION)	
OF RAYMOND T. DUNCAN FOR APPROVAL)	
OF A WATER FLOOD SECONDARY)	MOTION FOR EXPEDITED HEARING
RECOVERY PROJECT AND SIMULTANEOUS)	and
HEARING OF A CLASS II INJECTION)	MEMORANDUM IN SUPPORT
WELL APPLICATION, IN THE CAVE)	
CANYON FIELD, SAN JUAN COUNTY,)	
UTAH.)	

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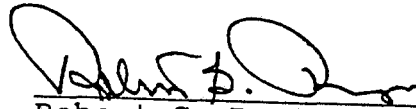
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Dated this 24th day of February, 1989.



Robert G. Pruitt, Jr.
PRUITT, GUSHEE & FLETCHER
Attorneys for Raymond T. Duncan
1850 Beneficial Life Tower
Salt Lake City, Utah 84111
Telephone: (801) 531-8446

Address of Applicant:

Raymond T. Duncan
1777 So. Harrison St.- Penthouse One
Denver, Colorado 80210
Telephone: (303) 759-3303

UIC CHECKLIST FOR APPLICATION APPROVAL

OPERATOR DUNCAN Oil WELL NUMBER Cave canyon 3-1
 SEC. 3 T. 38S R. 24E COUNTY SAN JUAN
 API # 43-037-31095
 NEW WELL DISPOSAL WELL NO ENHANCED RECOVERY WELL ✓

- Plat showing surface ownership	Yes <u> </u>	No <u>①</u>
- Application forms complete	Yes <u>✓</u>	No <u> </u>
- Schematic of well bore	Yes <u> </u>	No <u>✓ ②</u>
- Adequate geologic information	Yes <u>✓</u>	No <u> </u>
- Rate and Pressure information	Yes <u>③</u>	No <u> </u>
- Fluid source	Yes <u>✓</u>	No <u> </u>
- Analysis of formation fluid	Yes <u> </u>	No <u>✓ ④</u>
- Analysis of injection fluid	Yes <u> </u>	No <u>✓ ⑤</u>
- USDW information	Yes <u> </u>	No <u>✓ ⑥</u>
- Mechanical integrity test	Yes <u>⑦</u>	No <u> </u>

Comments: ①. Plat was not submitted but a list of
owners was ②. There is no schematic - Adequate information
was submitted to draw are ③. maximum values were submitted
however there it was not indicated how they were derived.
④ + ⑤ no fluid analysis ⑥. USDW appears to be
adequately protected ⑦. MIT must be conducted at
time of conversion.

Reviewed by W. J. J. 3/16/89

4 Producing

1 PA

5 wells in Area of review



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

April 5, 1989

Raymond T. Duncan
1777 South Harrison Street
Penthouse one
Denver, CO. 80210

Dear Mr. Duncan

Re: Cave Canyon Federal #3-1, Section 3, Township 38 South, Range 24
East, San Juan County, Utah

Pursuant to the Board of Oil, Gas and Mining Order in Cause
No. 217-1, conversion of the referenced well to a Class II injection
well is hereby approved.

The following actions are necessary to fully comply with this
approval:

- 1) Compliance with the UIC requirements for operation,
maintenance and reporting for Class II injection wells.
- 2) Conformance with all the provisions of the submitted
application including:
 - a. Performance of a step-rate pressure test on the well to
determine the fracture gradient and subsequent maximum
allowable injection pressure. The test shall be
performed as soon after commencing injection as the
injection rate has stabilized.
 - b. Sampling and analyzing the water from the water source
well and submittal of the results to the Division.
 - c. Performance of a pressure test prior to commencing
injection to establish mechanical integrity of the well
and notification to the Division prior to performing
the test to provide the opportunity to witness the test.

Page 2
Raymond T. Duncan
April 5, 1989

If you have any questions regarding this approval or the necessary requirements, please contact this office.

Best regards,

A handwritten signature in cursive script, reading "Dianne R. Nielson". The signature is written in dark ink and is positioned above the printed name and title.

Dianne R. Nielson
Director

UI1/76-77

RECEIVED
JUN 26 1989

JUN 15 1989

Application No. T64004 56 63 46
RECEIVED
09-1644

APPLICATION TO APPROPRIATE WATER

TEMPORARY

JUN 7 1989

NOTE:—The information given in the following blanks should be free from explanatory matter, but when necessary, a complete statement should be made on the following page under the heading "Explanatory."

DIVISION OF OIL, GAS & MINING
STATE OF UTAH
WATER RIGHTS
PRICE
purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for uses indicated by (X) in the proper box or boxes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

1. Irrigation ☐ Domestic ☐ Stockwatering ☐ Municipal ☐ Power ☐ Mining ☐ Other Uses ☒

2. The name of the applicant is Raymond T. Duncan

3. The Post Office address of the applicant is 1777 S. Harrison St., PH-1, Denver, CO 80210

4. The quantity of water to be appropriated .49 second-feet and/or _____ acre-feet

5. The water is to be used for injection at Cave Can- yon Water Flood from June 1 to October 1
(Major Purpose) (Month) (Day) (Month) (Day)

other use period _____ from _____ to _____
(Minor Purpose) (Month) (Day) (Month) (Day)

and stored each year (if stored) from _____ to _____
(Month) (Day) (Month) (Day)

6. The drainage area to which the direct source of supply belongs is _____
(Leave Blank)

7. The direct source of supply is* Underground Water
(Name of stream or other source)

which is tributary to _____, tributary to _____

*Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring.

8. The point of diversion from the source is in San Juan County, situated at a point*
North 1800' & East 1845' from SW Corner Section 3, T38S, R24E, SLB & M.

(14 miles SE of Blanding) Blanding Quad

*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of diversion is not defined definitely.

9. The diverting and carrying works will consist of 7-inch casing, 3300 feet deep

10. If water is to be stored, give capacity of reservoir in acre-feet _____ height of dam _____
area inundated in acres _____ legal subdivision of area inundated _____

11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:

_____ Total _____ Acres

12. Is the land owned by the applicant? Yes _____ No X If "No," explain on page 2.

13. Is this water to be used supplementally with other water rights? Yes _____ No X
If "yes," identify other water rights on page 2.

14. If application is for power purposes, describe type of plant, size and rated capacity. _____

15. If application is for mining, the water will be used in _____ Mining District at the _____ mine, where the following ores are mined _____

16. If application is for stockwatering purposes, number and kind of stock watered _____

17. If application is for domestic purposes, number of persons _____, or families _____

18. If application is for municipal purposes, name of municipality _____

19. If application is for other uses, include general description of proposed uses Injection to increase ultimate Oil recovery from Cave Canyon Field

20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. Cave Canyon Federal No. 3-1 43-037-31095
South 2140' & East 200' from NW Corner Section 3-38S-24E, SLB&M (SW NW)

21. The use of water as set forth in this application will consume .49 second-feet and/or acre-feet of water and 0 second feet and/ or acre feet will be returned to the natural stream or source at a point described as follows: _____

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed application:

See Attachment I.
Duncan is requesting this Temporary Use Permit until the the Application to
Appropriate Water can be approved.

(Use page 4 if additional explanatory is needed.)

The quantity of water sought to be appropriated is limited to that which
can be beneficially used for the purpose herein described

John A. Bettel
Signature of Applicant*

*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its proper officer, or in the name of the partnership by one of the partners, and the names of the other partners shall be listed. If a corporation or partnership, the affidavit below need not be filled in. If there is more than one applicant, a power of attorney, authorizing one to act for all, should accompany the Application.

DECLARATION OF CITIZENSHIP

STATE OF ~~UTAH~~ Colorado }
County of ~~UTAH~~ Denver. } ss

On the 30th day of May, 1989, personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States, or has declared his intention to become such a citizen.

My commission expires: 2/24/90

(SEAL)

Brenda Verbeck
Notary Public

STATE ENGINEER'S ENDORSEMENT

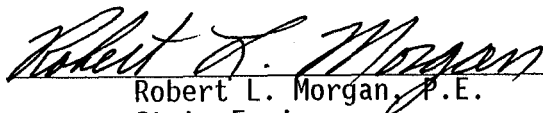
WATER RIGHT NUMBER: 09 - 1644

APPLICATION NO. T64004

1. June 7, 1989 Application received by MP.
 2. June 13, 1989 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated June 23, 1989, subject to prior rights and this application will expire on June 23, 1990.


Robert L. Morgan, P.E.
State Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		7. UNIT AGREEMENT NAME Cave Canyon Lease WF	
2. NAME OF OPERATOR Raymond T. Duncan		8. FARM OR LEASE NAME Cave Canyon Federal	
3. ADDRESS OF OPERATOR 1777 S. Harrison St., P-1, Denver, CO 80210		9. WELL NO. No. 3-1	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FNL & 200' FWL (SW NW)		10. FIELD AND POOL, OR WILDCAT Wildcat	
14. PERMIT NO. 42-037-31095		12. COUNTY OR PARISH San Juan	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4328' GR 5342' KB		13. STATE UT	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Conversion To Injection <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The subject well was converted to injection on 7-1-89 as follows:

POOH w/pkr & tbg. RIH w/ 2 jts 2-7/8" 6.5# J-55 tbg, pkr, and 187 jts 2-7/8" 6.5# J-55 tbg. Set pkr @ 5645' w/ 17,000# compression. Tested to 2500# and held okay. Loaded backside of hole above pkr with 10 gal. Howco Anhib. mixed w/ salt water. Well put on water injection July 2, 1989.

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
B-TAS	
MICROFILM	
FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED John A. Bettridge TITLE Operations Superintendent DATE August 31, 1989
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug a well in a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47876	
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
3. ADDRESS OF OPERATOR 1777 S. Harrison St., P-1, Denver, CO 80210		7. UNIT AGREEMENT NAME Cave Canyon Lease WF	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FNL & 200' FWL (SW NW)		8. FARM OR LEASE NAME Cave Canyon Federal	
14. PERMIT NO. 42-037-31095		9. WELL NO. No. 3-1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4328' GR 5342' KB		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 3-T38S-R24E	
		12. COUNTY OR PARISH San Juan	
		13. STATE UT	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other) ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
ABANDON* ☐
CHANGE PLANS ☐

WATER SHUT-OFF ☐
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other) Conversion To Injection ☒

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The subject well was converted to injection on 7-1-89 as follows:

POOH w/pkr & tbg. RIH w/ 2 jts 2-7/8" 6.5# J-55 tbg, pkr, and 187 jts 2-7/8" 6.5# J-55 tbg. Set pkr @ 5645' w/ 17,000# compression. Tested to 2500# and held okay. Loaded backside of hole above pkr with 10 gal. Howco Anhib. mixed w/ salt water. Well put on water injection July 2, 1989.

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
2-TAS	
3. MICROFILM	
4- FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED

John A. Bettridge

TITLE Operations Superintendent

DATE August 31, 1989

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

DUNCAN ENERGY COMPANY

PENTHOUSE ONE

1777 SOUTH HARRISON STREET

DENVER, COLORADO 80210-3925

TELEPHONE (303) 759-3303

FAX (303) 757-0252

RECEIVED
JAN 23 1991

January 21, 1991

Bureau of Land Management
P.O. Box 970
Moab, Utah 84532

DIVISION OF
OIL, GAS & MINING

Gentlemen:

Enclosed please find sundry notice for the change of operatorship from Raymond T. Duncan to Duncan Energy Company for the Cave Canyon Lease Waterflood.

If you require further data please contact Marie O'Keefe of this office.

Sincerely,

Marie O'Keefe

Marie O'Keefe
Engineering Technician

/mo

cc: State of Utah
3 Triad Center #350
Salt Lake City, UT 84180-1203

Effective 6-21-90
per Marie O'Keefe *for*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.

SUBMIT IN TRIPLICATE

RECEIVED
JAN 23 1991

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other See Below

2. Name of Operator
Raymond T. Duncan

3. Address and Telephone No.
1777 S. Harrison St. P-1 Denver, CO. 80210 303-759-3303

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
See Below

5. Lease Designation and Serial No.
U-47876

6. If Indian, Allottee or Tribe Name
NA

7. If Unit or CA, Agreement Designation
Cave Canyon Lease
Waterflood

8. Well Name and No.
See Below

9. API Well No.
See Below

10. Field and Pool, or Exploratory Area
Cave Canyon Ismay

11. County or Parish, State
San Juan, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Change of Operator
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Raymond T. Duncan was the previous operator of the Cave Canyon Lease Waterflood. Duncan Energy Company is now the operator of record for the Cave Canyon Lease Waterflood. Offices, personnel and all operations will continue to be the same for Duncan Energy Company as they were for Raymond T. Duncan. Duncan Energy Co. is responsible under the terms and conditions of the lease for operations conducted on the leased lands.

WELL NAME	LOCATION	WELL STATUS	API #
Cave Canyon 3-2	T38S R24E Sec 3	NESW Producing Oil Well	43-037-31120
Cave Canyon 4-3	" " " 4	NENE " " "	43-037-31414
Cave Canyon 3-3	" " " 3	SENW Shut in Oil Well	43-037-31413
Wells Federal 1-4	" " " 4	NENE Producing Oil Well	43-037-31028
Cave Canyon 3-1	" " " 3	SWNW Water Injection Well	43-037-31095
1-Cave-Canyon-WSW	" " " 3	NESW Water Supply Well	43-037-99998
Cave Canyon 4-4	" " " 4	NENE Producing Oil Well	43-037-31539
Cave Canyon 12-3	" " " 3	SWNW Completing Oil Well	43-037-31567
Cave Canyon 13-3	" " " 3	NWSW Approved Drlg Location	43-037-31570
Cave Canyon 3-4	" " " 3	NWNW " " "	43-037-31542
Cave Canyon 3-5	" " " 3	NWSE " " "	43-037-31541

14. I hereby certify that the foregoing is true and correct

Signed J. J. Fallon Title Production Manager Date January 21, 1991

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☐ Well File _____

☐ Suspense

☒ Other

(Location) Sec _____ Twp _____ Rng _____

(Return Date) _____

OPERATOR CHANGE

(API No.) _____

(To - Initials) _____

FILE.

1. Date of Phone Call: 1-28-91 Time: 10:00

2. DOGM Employee (name) L. ROMERO (Initiated Call ☒)
Talked to:

Name MARIE O'KEEFE (Initiated Call ☐) - Phone No. (303) 759-3303

of (Company/Organization) DUNCAN ENERGY COMPANY/N3370

3. Topic of Conversation: EFFECTIVE DATE OF OPERATOR CHANGE

4. Highlights of Conversation: EFFECTIVE DATE 6-21-90, ALSO NO DOCUMENTATION
REQUIRED FROM RAYMOND T. DUNCAN (DUNCAN ENERGY COMPANY & RAYMOND T. DUNCAN ARE
ONE IN THE SAME COMPANY).



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

January 30, 1991

Duncan Energy Company
PH 1, 1777 S. Harrison St.
Denver, Colorado 80210

Gentlemen:

RE: Transfer of Authority to Inject - Cave Canyon #3-1 Well, Sec. 3, T. 38S,
R. 24E - San Juan County, Utah

The Division has received a request of operator change for the Cave Canyon #3-1 Well, from Raymond T. Duncan to Duncan Energy Company.

Please complete and return to our office the enclosed UIC Form 5, as required by R615-8-21 of the Oil and Gas Conservation General Rules.

If I can be of assistance, please contact me at (801)538-5340.

Sincerely,

Gil Hunt
UIC Manager

lr
Enclosure

TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5

Well name and number: Cave Canyon Federal 3-1
Field or Unit name: Cave Canyon Lease Waterflood API no. 43-037-31095
Well location: QQ SWNW section 3 township 38S range 24E county San Juan
Effective Date of Transfer: June 21, 1990

CURRENT OPERATOR

Transfer approved by:

Name W. S. Fallin Company Raymond T. Duncan
Signature W. S. Fallin Address 1777 S. Harrison St. P-1
Title Production Manager Denver, Co. 80210
Date February 6, 1991 Phone (303) 759-3303

Comments:

NEW OPERATOR

Transfer approved by:

Name W. S. Fallin Company Duncan Energy Company
Signature W. S. Fallin Address 1777 S. Harrison St. P-1
Title Production Manager Denver, Co. 80210
Date February 6, 1991 Phone (303) 759-3303

Comments: Offices, operations and personnel are the same for Duncan Energy Co.
as they were for Raymond T. Duncan.

(State use only)

Transfer approved by [Signature] Title DEC Manager

Approval Date 2-14-91

1-
2-
3-
4-
5-
6-

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold)
☐ Designation of Operator

☐ Designation of Agent
☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: _____)

TO (new operator) DUNCAN ENERGY COMPANY
(address) _____

FROM (former operator) DUNCAN, RAYMOND T.
(address) _____

phone () _____
account no. N 3370

phone () _____
account no. N0360

Well(s) (attach additional page if needed):

Name: <u>CAVE CANYON FED 13-3/DRL</u>	API: <u>4303731570</u>	Entity: <u>99999</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U-47876</u>
Name: <u>CAVE CYN FED 3-4/DRL</u>	API: <u>4303731542</u>	Entity: <u>99999</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U-47876</u>
Name: <u>CAVE CYN FED 3-5/DRL</u>	API: <u>4303731541</u>	Entity: <u>99999</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U-47876</u>
Name: <u>CAVE CANYON #1-33/ISMY</u>	API: <u>4303731276</u>	Entity: <u>9775</u>	Sec <u>33</u> Twp <u>37N</u> Rng <u>24E</u>	Lease Type: <u>U-40751</u>
Name: <u>CAVE CANYON 1 (WSW)</u>	API: <u>(NOT ON SYS)</u>	Entity: _____	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U-47876</u>
Name: <u>(Water Rights)</u>	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form).
2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).
3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: _____.
4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above.
6. Cardex file has been updated for each well listed above.
7. Well file labels have been updated for each well listed above.
8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.
9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 5, Entity Action Form).
2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
3. The former operator has requested a release of liability from their bond (yes/no) ____.
Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
2. Copies of documents have been sent to State Lands for changes involving State leases.

INDEXING

1. All attachments to this form have been microfilmed. Date: _____ 19____.

FILED

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form and the original attachments have been filed in the Operator Change file.

REMARKS

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:	
1- LCR	<i>[initials]</i>
2- DTS	<i>[initials]</i>
3- VLC	<i>[initials]</i>
4- RJF	<i>[initials]</i>
5- RWM	<i>[initials]</i>
6- LCR	<i>[initials]</i>

Attach all documentation received by the division regarding this change.
 Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 6-21-90)

TO (new operator) DUNCAN ENERGY COMPANY
 (address) PH 1, 1777 S. HARRISON ST.
DENVER, CO 80210
 phone (303) 759-3303
 account no. N 3370

FROM (former operator) DUNCAN, RAYMOND T.
 (address) 1777 S. HARRISON ST., PH 1
DENVER, CO 80210
 phone (303) 759-3303
 account no. N 0360

Well(s) (attach additional page if needed):

Name: CAVE CANYON #3-2/ISMY	API: <u>4303731120</u>	Entity: <u>9775</u>	Sec: <u>38SDnn24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CYN FED 4-3/ISMY	API: <u>4303731414</u>	Entity: <u>9775</u>	Sec: <u></u>	e: <u>U-47876</u>
Name: CAVE CYN FED 3-3/ISMY	API: <u>4303731413</u>	Entity: <u>9775</u>	Sec: <u></u>	e: <u>U-47876</u>
Name: WELLS FED #1/ISMY	API: <u>4303731028</u>	Entity: <u>9775</u>	Sec: <u></u>	e: <u>U-47876</u>
Name: CAVE CANYON #3-1/ISMY	API: <u>4303731095</u>	Entity: <u>9775/pww</u>	Sec: <u></u>	e: <u>U-47876</u>
Name: CAVE CANYON FED 4-4/ISMY	API: <u>4303731539</u>	Entity: <u>9775</u>	Sec: <u></u>	e: <u>U-47876</u>
Name: CAVE CANYON FED 12-3/DR	API: <u>4303731567</u>	Entity: <u>9775</u>	Sec: <u></u>	e: <u>U-47876</u>

UIC - Auth. to Ing. to Rwm
1-13-91

OPERATOR CHANGE DOCUMENTATION

- 1-23-91* 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *(Rec. 1-23-91)*
- 1-23-91* 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). *(Rec. 1-23-91)*
- 1-28-91* 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) yes If yes, show company file number: # 110244. *(1-28-91)*
4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- 1-31-91* 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(1-31-91)*
6. Cardex file has been updated for each well listed above.
7. Well file labels have been updated for each well listed above.
8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.
9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1- LCR	<input checked="" type="checkbox"/>
2- DTS	<input checked="" type="checkbox"/>
3- VLC	<input checked="" type="checkbox"/>
4- RJF	<input checked="" type="checkbox"/>
5- RWM	<input checked="" type="checkbox"/>
6- LCR	<input checked="" type="checkbox"/>

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold)

☐ Designation of Agent

☐ Designation of Operator

☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 6-21-90)

TO (new operator) DUNCAN ENERGY COMPANY
(address) PH 1, 1777 S. HARRISON ST.
DENVER, CO 80210

FROM (former operator) DUNCAN, RAYMOND T.
(address) 1777 S. HARRISON ST., PH 1
DENVER, CO 80210

phone (303) 759-3303
account no. N 3370

phone (303) 759-3303
account no. N 0360

Well(s) (attach additional page if needed):

Name: CAVE CANYON #3-2/ISMY	API: <u>4303731120</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CYN FED 4-3/ISMY	API: <u>4303731414</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CYN FED 3-3/ISMY	API: <u>4303731413</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: WELLS FED #1/ISMY	API: <u>4303731028</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CANYON #3-1/ISMY	API: <u>4303731095</u>	Entity: <u>9775/pnw</u>	Sec <u>3</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CANYON FED 4-4/ISMY	API: <u>4303731539</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>
Name: CAVE CANYON FED 12-3/DR	API: <u>4303731567</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38SRng24E</u>	Lease Type: <u>U-47876</u>

OPERATOR CHANGE DOCUMENTATION

- 1 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec. 1-23-91)
- 2 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Rec. 1-23-91)
- 3 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) yes If yes, show company file number: #110244. (1-28-91)
- 4 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- 5 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (1-31-91)
- 6 6. Cardex file has been updated for each well listed above.
- 7 7. Well file labels have been updated for each well listed above.
- 8 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.
- 9 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 5, Entity Action Form). *Cave Cyn. Unit / Ismy PA.*
2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
3. The former operator has requested a release of liability from their bond (yes/no) _____. Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
2. Copies of documents have been sent to State Lands for changes involving State leases.

RECORDING

1. All attachments to this form have been microfilmed. Date: February 5 1981.

FILED

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form and the original attachments have been filed in the Operator Change file.

REMARKS

9/10/28 Btm/meab Have received documentation, bonding looks ok. Is not approved as of yet. will call when approved.

9/10/29 Btm Approved all wells eff. 6-21-90. (Unit Oper. Duncan Energy Company)



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

March 4, 1991

Duncan Energy Company
1777 S. Harrison St. P-1
Denver, Colorado 80210

43-037-31095

Gentlemen:

Re: Cave Canyon Federal #3-1, Section 3, Township 38 South, Range 24 East, San Juan County, Utah

The approval issued by this office to convert the referenced well to injection listed several conditions (see attached letter). To date this office has not received results of the step-rate test or the analysis of a sample from the water source well.

Please provide these two items to fully comply with the approval issued. If you have questions concerning this matter, please call.

Sincerely,

Gil Hunt
UIC Manager

ldc
WUI37

Spoke with John Battidore 4/30/91
He indicated that a step rate test
will be conducted in the next 30 days.

DUNCAN ENERGY COMPANY

PENTHOUSE ONE

1777 SOUTH HARRISON STREET
DENVER, COLORADO 80210-3925
TELEPHONE (303) 759-3303
FAX (303) 757-0252

May 2, 1991

Mr. Dan Jarvis
State of Utah
Division of Oil, Gas and Mining
355 West North Temple
Three Triad Center
Suite # 350
Salt Lake City, Utah 84180-1203

RECEIVED

MAY 06 1991

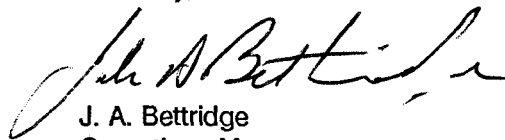
DIVISION OF
OIL GAS & MINING

RE: Cave Canyon WSW # 1
Cave Canyon Federal # 3-1
Injection Well
Sec. 3-T38S-R24E
San Juan County, Utah

Dear Dan:

Per our telephone conversation of April 30, 1991, please find enclosed a water analysis for the Cave Canyon Water Supply Well # 1 and the sundry notice for our plans to run a step rate test at the subject well. As we discussed we will contact you prior to running the tests so that you may have an opportunity to observe the test if you wish. Should you have any questions or require any additional information concerning this matter, please contact me at (303)-759-3303.

Sincerely,



J. A. Bettridge
Operations Manager

JAB/plc

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

U-47876

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA, Agreement Designation

Cave Canyon Lease Waterflood

8. Well Name and No.

Cave Canyon Federal 3-1

9. API Well No.

43-037- 31095

10. Field and Pool, or Exploratory Area

Cave Canyon Field

11. County or Parish, State

San Juan County, UT.

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other Injection Well

2. Name of Operator

Duncan Energy Company

3. Address and Telephone No.

1777 S. Harrison St. P-1 Denver, CO. 80210 303-759-3303

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2140' FNL and 200' FWL Sec 3 T38S R24E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other step rate test

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Duncan Energy plans to conduct a step rate test at the subject well by June 15, 1991. We will vary the rate while monitoring surface injection pressure to determine surface parting pressure. Prior to conducting the test we will contact the Division of Oil and Gas with actual dates and time.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 5-8-91
BY: [Signature]

RECEIVED

MAY 06 1991

DIVISION OF
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct

Signed Marie O'Keefe

Title Engineering Technician

Date April 30, 1991

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : R.T. DUNCAN

Date : 03-30-1990

Location: CAVE CANYON - WSW #1 (on 03-27-1990)

Specific Gravity:	<u>Sample 1</u>
Total Dissolved Solids:	1.001
pH:	1024
IONIC STRENGTH:	8.60
	0.023

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	0.933	18.7
Magnesium	(Mg ⁺²)	3.87	47.0
Sodium	(Na ⁺¹)	12.5	286
Iron (total)	(Fe ⁺²)	0.308	8.60
Barium	(Ba ⁺²)	0.013	0.900

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	2.20	134
Carbonate	(CO ₃ ⁻²)	4.00	120
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	2.03	97.7
Chloride	(Cl ⁻¹)	9.03	320

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
86°F	30°C	<u>Carbonate</u>	<u>Sulfate</u>
		0.90	-19

RECEIVED

MAY 06 1991

DIVISION OF
OIL GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. U-47876
2. Name of Operator Duncan Energy Company	6. If Indian, Allottee or Tribe Name N/A
3. Address and Telephone No. 1777 S. Harrison St. P-1 Denver, CO 80210	7. If Unit or CA, Agreement Designation Cave Canyon Federal
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2140' FNL & 200' FWL (SWNW) Sec 3 T38S R24E	8. Well Name and No. 3-1
	9. API Well No. 43-037-31095
	10. Field and Pool, or Exploratory Area Cave Canyon Field
	11. County or Parish, State San Juan, UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other <u>Step Rate Test</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Duncan Energy Company conducted a step rate test on the subject well July 25, 1991. The injection pressure was increased to 3100 psi which was the maximum allowable with the existing equipment. No indication of formation fracturing was observed. Therefore, Duncan Energy proposes to limit it's maximum injection pressure to 3000 psi. A copy of the test and resulting graph are attached.

RECEIVED

AUG 07 1991

DIVISION OF
OIL GAS & MINING

cc: State of Utah
Oil & Gas Conservation Commission

14. I hereby certify that the foregoing is true and correct

Signed Maria O'Keefe Title Engineering Technician Date August 2, 1991
(This space for Federal or State office use)

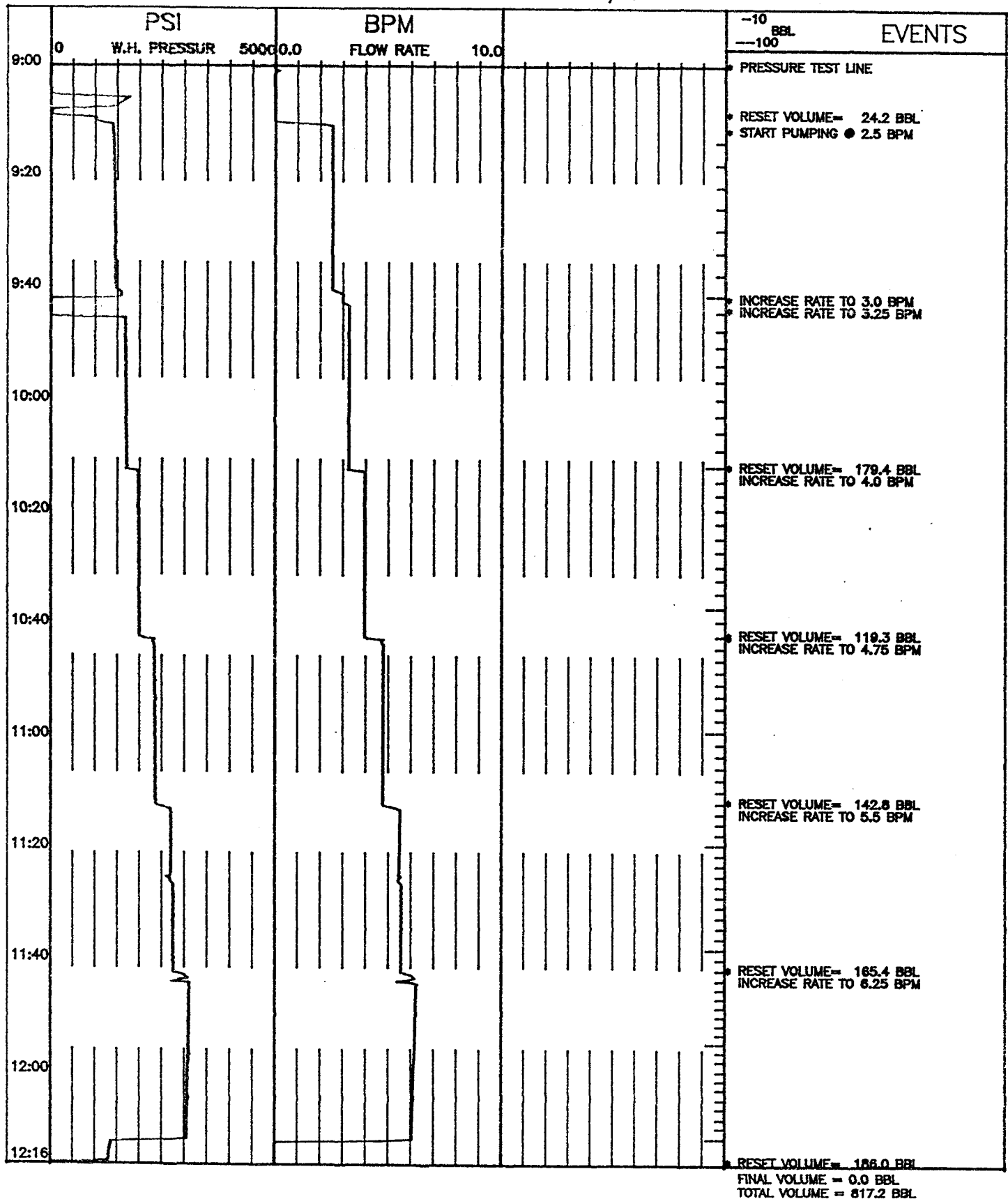
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

PACR PLOT



DUNCAN ENERGY
CAVE CANYON 3-1
SEC 3 T38S R24E

CORTEZ, CO.
STEP RATE TEST
1569-2650
JULY 25/91



PACR MicroVAX V2.0
26-JUL-91 08:28

Dowell Schlumberger



PACR PRINT

DUNCAN ENERGY
CAVE CANYON 3-1
SEC 3 T38S R24E

CORTEZ, CO.
STEP RATE TEST
1569-2650
JULY 25/91

TIME	PRESSURE	FLOW RATE	CUMUL VOLUME	EVENTS
HH:MM:SS	W.H. PRESSUR PSI	FLOW RATE BPM	BBL	
09:00:00	0	0.0	13.0	PRESSURE TEST LINE RESET VOLUME
09:00:24				
09:09:08				
09:10:00	1042	0.1	0.0	
09:20:00	1426	2.5	24.9	
09:30:00	1444	2.5	50.3	
09:40:00	1449	2.5	75.8	
09:50:00	1682	3.3	107.8	
10:00:00	1686	3.3	140.6	
10:10:00	1700	3.3	173.3	
10:11:56				RESET VOLUME
10:20:00	1969	4.0	31.9	
10:30:00	1974	4.0	71.7	RESET VOLUME
10:40:00	1988	4.0	111.4	
10:42:00				
10:50:00	2339	4.8	38.1	
11:00:00	2348	4.8	85.9	RESET VOLUME
11:10:00	2348	4.8	133.6	
11:11:56				
11:20:00	2709	5.5	44.3	
11:30:00	2755	5.6	99.6	RESET VOLUME
11:40:00	2750	5.6	155.5	
11:41:48				
11:50:00	3102	6.2	50.5	
12:00:00	3070	6.1	112.3	

PACR MicroVAX V2.0
26-JUL-91 08:28

Dowell Schlumberger



PACR PRINT

DUNCAN ENERGY
CAVE CANYON 3-1
SEC 3 T38S R24E

CORTEZ, CO.
STEP RATE TEST
1569-2650
JULY 25/91

TIME	PRESSURE	FLOW RATE	CUMUL VOLUME	EVENTS
HH:MM:SS	W.H. PRESSUR PSI	FLOW RATE BPM	BBL	
12:10:00	3047	6.0	173.2	
12:16:12				RESET VOLUME
12:16:20	0	0.0	0.0	
				TOTAL VOLUME= 817.2 BBL

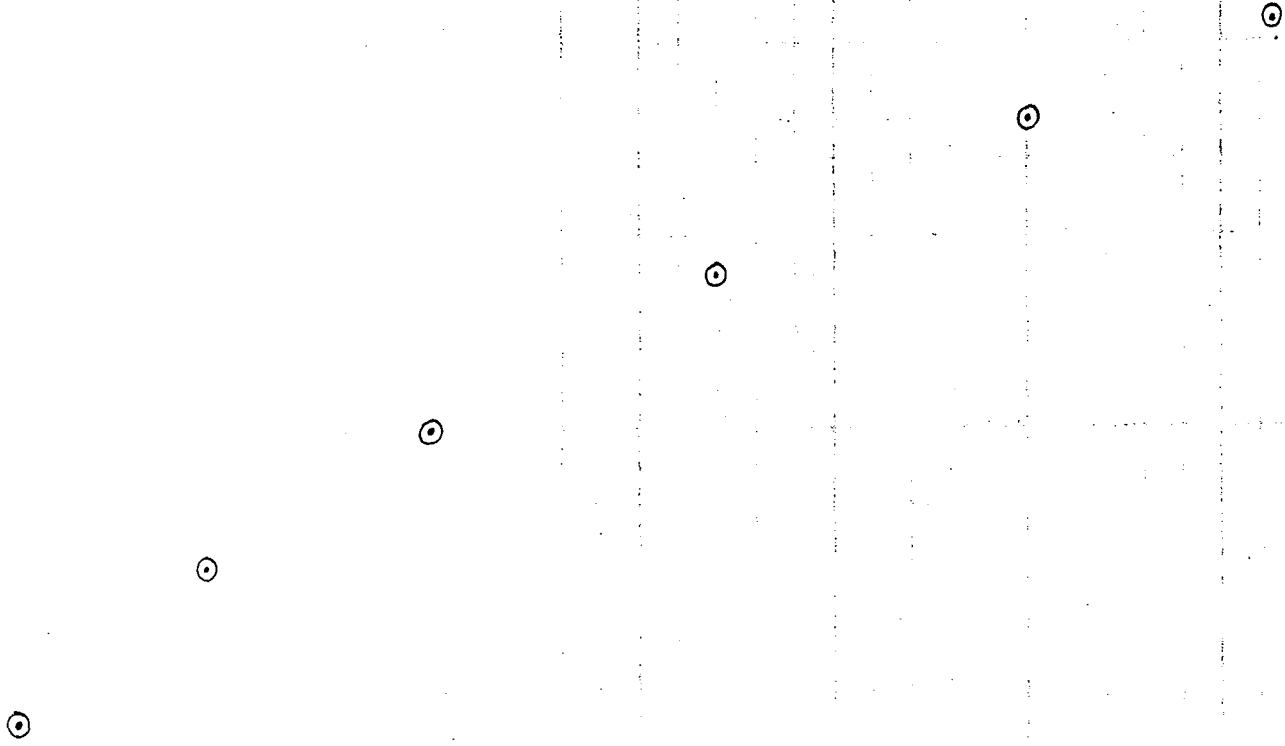
STEP RATE TEST 7/25/91
 CAVE CANYON 12-3
 SEC 3 - T38S-R24E
 SAN JUAN CO, UT

8
7
6
5
4
3
2

1000 1250 1500 1750 2000 2250 2500 2750 3000 3250

PLANT INJECTION PRESSURE (PSI)

22-141 50 SHEETS
 22-142 100 SHEETS
 22-144 200 SHEETS



DUNCAN ENERGY COMPANY

JOHN A. BETTRIDGE

Operations Manager

PENTHOUSE ONE

1777 SOUTH HARRISON STREET

DENVER, COLORADO 80210-3925

(303) 759-3303

HOME: (303) 733-3604

FAX: (303) 782-0649

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
INJECTION WELL INSPECTION RECORD

MICROFICHE

OPERATOR: Duncan Oil API: 43-037-31095
WELL NAME: Cave Cyn 3-1 FIELD: Cave Cyn
SECTION: 3 TWP: 38S RANGE: 24E SIGN: X
INSPECTOR: Glenn TIME: 7:30 AM DATE: 9/25/91

INJECTION TYPE:
DISPOSAL: _____ ENHANCED RECOVERY: X STORAGE: _____

SINGLE COMPLETION:

TUBING PRESSURE: _____ CASING PRESSURE: _____
SURFACE CASING PRESSURE: _____
INJECTING: _____ SHUT-IN: _____
TOTAL BARRELS: _____ RATE: _____

DUAL COMPLETION:

TUBING PRESSURE: _____ CASING PRESSURE: _____
SURFACE CASING PRESSURE: _____

A. SHORT STRING:

INJECTING: _____ SHUT-IN: _____
TOTAL BARRELS: _____ RATE: _____

B. LONG STRING:

INJECTING: _____ SHUT-IN: _____
TOTAL BARRELS: _____ RATE: _____

REMARKS: _____

John Bettridge Co. Rep.
9/25/91 Rigged up D-5 @ wtr. Plant Pumped
up Flow Line for test.

1st 9:19 AM
9:30

1400-1430 PSI - 2.50-2.54 BPM 26 BBIs Pumped
1440-1460 PSI - 2.50-2.54 BPM

2nd 9:40
9:45

1550-1580 PSI - ~~2.99~~ 3.00 BPM
1670-1680 PSI 3.28 BPM increased BPM
104 BBIs Pumped

3rd 10:15 AM

1960-2000 PSI 3.95-3.98 BPM - 119 BBIs Pumped

4th 10:45 AM

2310-2340 PSI 4.77-4.78 BPM 143 BBIs Pumped

5th 11:15 AM

2690-2700 PSI 5.51-5.54 BPM 163 BBIs Pumped

6th 11:45 AM

3100-3120 PSI 6.24-6.25 BPM

12:15 PM

1280 PSI instant S.I 184 BBIs Pumped

MICROFICHE

DUNCAN ENERGY COMPANY

RECEIVED

AUG 28 1992

**DIVISION OF
OIL GAS & MINING**

August 25, 1992

Mr. Dan Jarvis
State of Utah
355 West North Temple
3 Triad Center Suite 350
Salt Lake City, Utah 84180-1203

Dear Mr. Jarvis:

At the request of John Bettridge of this office, enclosed please find the sundry notice reporting the conversion of the Cave Canyon Federal #3-1 to injection, including pressure data.

If you require more information, please call me.

Yours truly,

Marie O'Keefe

Marie O'Keefe
Sr. Engineering Technician

MDO/mo

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME Cave Canyon Lease WF	
2. NAME OF OPERATOR Raymond T. Duncan		8. FARM OR LEASE NAME Cave Canyon Federal	
3. ADDRESS OF OPERATOR 1777 S. Harrison St., P-1, Denver, CO 80210		9. WELL NO. No. 3-1	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2140' FNL & 200' FWL (SW NW)		10. FIELD AND POOL, OR WILDCAT Wildcat	
14. PERMIT NO. 43-037-31095		12. COUNTY OR PARISH San Juan	
15. ELEVATIONS (Show whether DF, RT, CR, etc.) 4328' GR 5342' KB		13. STATE UT	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Conversion To Injection <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The subject well was converted to injection on 7-1-89 as follows:

POOH w/pkr & tbg. RIH w/ 2 jts 2-7/8" 6.5# J-55 tbg, pkr, and 187 jts 2-7/8" 6.5# J-55 tbg. Set pkr @ 5645' w/ 17,000# compression. Tested to 2500# and held okay. Loaded backside of hole above pkr with 10 gal. Howco Anhib. mixed w/ salt water. Well put on water injection July 2, 1989.

18. I hereby certify that the foregoing is true and correct

SIGNED John A. Bettridge TITLE Operations Superintendent DATE August 31, 1989

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

May 5, 1994

Raymond T. Duncan
1777 S. Harrison Street
Denver, Colorado 80210

Re: Pressure Test for Mechanical Integrity, Cave Canyon 3-1, Injection Well, Sec. 3, T. 38 S., R. 24 E., San Juan County, Utah

Gentlemen:

The Underground Injection Control Program which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five year period beginning October, 1982. Our records indicate the above referenced well is due for testing. Please make arrangements and ready the well for testing during the week of May 23, 1994 as outlined below:

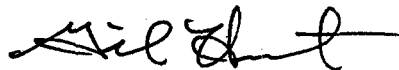
1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.

Page 2
Pressure Test
May 5, 1994

4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
5. All bradenhead valves with exception of the tubing on the injection wells must be shut in 24 hours prior to testing.

Please contact Dan Jarvis at (801)538-5340 to arrange a meeting time and place or negotiate a different date if this one is unacceptable.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt", with a stylized flourish at the end.

Gil Hunt
UIC Program Manager

ldc
Attachment
WOI52

STATE OF UTAH
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

INJECTION WELL - PRESSURE TEST

Test Date: <u>5/26/94</u>	Well Owner/Operator: <u>Duncan Energy</u>
Disposal Well: _____	Enhanced Recovery Well: <u>X</u> Other: _____
API No.: <u>43-037-31095</u>	Well Name/Number: <u>CANYON 3-1</u>
Section: <u>3</u>	Township: <u>38 S</u> Range: <u>24 E</u>

Initial Conditions:

Tubing - Rate: 2500 BPD Pressure: 1200 psi
Casing/Tubing Annulus - Pressure: ? psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1000</u>	<u>1200</u>
5	<u>900</u>	<u>1200</u>
10	<u>850</u>	<u>1200</u>
15	<u>850</u>	<u>1200</u>
20	_____	_____
25	_____	_____
30	_____	_____

Results: Pass/Fail

Conditions After Test:

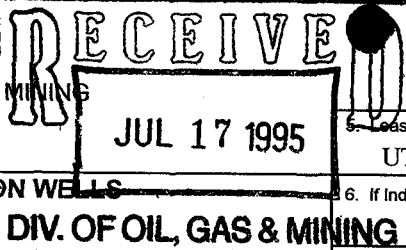
Tubing Pressure: 1200 psi
Casing/Tubing Annulus Pressure: 0 psi

REMARKS:

(RW Trucking - Hot Oil) - small leak in Hot oil
truck - fixed well passed MIT

Dennis Sanders
Operator Representative

D. J. Jann
DOGM Witness

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Designation and Serial Number:

UTU 47876

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.

Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well:

OIL ☐ GAS ☐ OTHER: Water Injection

8. Well Name and Number:

Cave Canyon Federal 3-1

2. Name of Operator:

Giant Exploration & Production Company

9. API Well Number:

43-037-31095

3. Address and Telephone Number:

P.O. Box 2810, Farmington, New Mexico 87499 (505)326-3325

10. Field and Pool, or Wildcat:

Cave Canyon

4. Location of Well:

Footages: 2140' FNL, 200' FWL

County: San Juan

QQ, Sec., T., R., M.: SW/4, NW/4, Sec. 3, T38S, R24E

State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT

(Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other _____ | |

Approximate date work will start _____

SUBSEQUENT REPORT

(Submit Original Form Only)

- | | |
|---|---|
| <input type="checkbox"/> Abandonment * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Other <u>Change of Operator</u> | |

Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Giant Exploration & Production Company purchased the above mentioned well from Duncan Energy Company effective 06-23-95.

13.

Name & Signature: Jeffrey R. Vaughan

Title: Vice President/Operations

Date: JUL 14 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir,
Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	8. Well Name and No.
2. Name of Operator Giant Exploration & Production Company	9. API Well No.
3. Address and Telephone No. P.O. Box 2810, Farmington, New Mexico 87499 (505)326-3325	10. Field and Pool, or Exploratory Area Cave Canyon
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	11. County or Parish, State San Juan, Utah

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

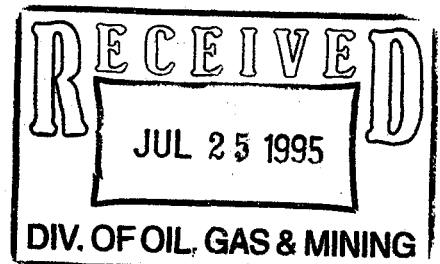
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Change of Operator</u>	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Giant Exploration & Production Company purchased the above mentioned lease from Duncan Energy Company effective 06-23-95. Giant's bond number is SLR 111 3289 3097.

Listed below is the purchased well and API # for Lease Number UTU47876:

Cave Canyon Federal 3-1 - API # 43-037-31095
Cave Canyon Federal 3-2 - API # 43-037-31120
Cave Canyon Federal 3-3 - API # 43-037-31413
Cave Canyon Federal 4-3 - API # 43-037-31414
Cave Canyon Federal 4-4 - API # 43-037-31539
Cave Canyon Federal 4-5 - API # 43-037-31695
Cave Canyon Federal 12-3 - API # 43-037-31567
Cave Canyon WSW 1 - API # 43-037-99998
Wells Federal 1-4 - API # 43-037-31028



14. I hereby certify that the foregoing is true and correct

Signed Jeffrey R. Vaughan Title Vice President/Operations Date JUL 14 1995

(This space for Federal or State office use)

Approved by _____ Title Associate District Manager Date _____

Conditions of approval, if any:

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Giant Exploration & Production Company
Several Wells
Secs. 3 & 4, T. 38 S., R. 24 E.
San Juan County, Utah
Lease UTU47876

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Giant Exploration & Production Company is considered to be the operator of the above wells and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by NM1759 (Principal - Giant Exploration & Production Company) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

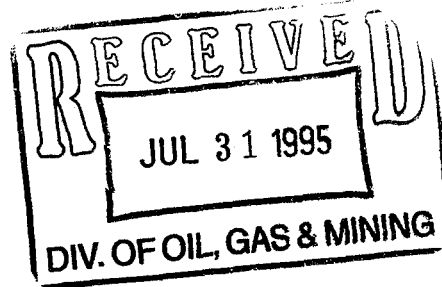
GIANT
EXPLORATION &
PRODUCTION COMPANY

P.O. Box 2810
Farmington, New Mexico
87499

505
326-3325

July 28, 1995

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203



Re: Cave Canyon Federal No. 3-1
Sec. 3, T38S, R24E
San Juan County, Utah

Gentlemen:

Giant Exploration & Production Company purchased the subject well from Duncan Energy Company effective 6/23/95. Enclosed please find the Transfer of Authority to Inject (UIC Form 5) on the subject well.

If you have any questions regarding this matter, please call me at (505) 326-3325.

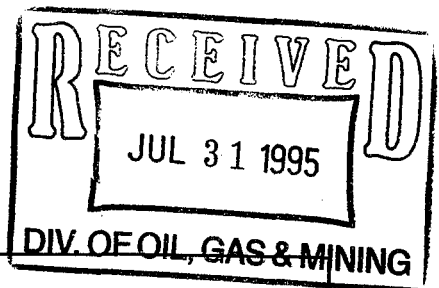
Sincerely,

Diane G. Jaramillo
Production Regulatory Manager

DGJ/

Enclosure

TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5



Well name and number: Cave Canyon Federal 3-1

Field or Unit name: Cave Canyon API no. 43-037-31095

Well location: QQ SWNW section 3 township 38S range 24E county San Juan

Effective Date of Transfer: 06-23-95

CURRENT OPERATOR

Transfer approved by:

Name Gina Payne Company Duncan Energy Company

Signature [Signature] Address 1777 S. Harrison St., Pnths 1

Title Engineering Technician Denver, Colorado 80210

Date 7-12-95 Phone (303)759-3303

Comments:

NEW OPERATOR

Transfer approved by:

Name Jeffrey R. Vaughan Company Giant Exploration & Production

Signature [Signature] Address P.O. Box 2810

Title Vice President/Operations Farmington, New Mexico 87499

Date JUL 14 1995 Phone (505)326-3325

Comments:

(State use only)

Transfer approved by [Signature] Title Executive Manager

Approval Date 8-9-95

**95009 mailed appr. to both operators & Case No. 2121 to Giant. Jee*

m OGCC-1 b.

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. UTU47876	
2. NAME OF OPERATOR Duncan Energy Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 1777 South Harrison Street, P-1, Denver, CO 80210		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface See Below		8. FARM OR LEASE NAME	
14. PERMIT NO.		9. WELL NO.	
15. ELEVATIONS (Show whether DF, ET, GR, etc.)		10. FIELD AND POOL, OR WILDCAT Cave Canyon	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	
		12. COUNTY OR PARISH San Juan	
		13. STATE Utah	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☐
☐
☐

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON*

CHANGE PLANS

☐
☐
☐
☐
☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

☐
☐
☐
☐
☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Effective 6-23-95, Giant Exploration & Production Company has taken over operations of the above-mentioned lease. Listed below are the purchased wells and API #s for Lease Number UTU47876:

Cave Canyon Federal 3-1 - API #43-037-31095, Sec. 3-T38S-R24E
Cave Canyon Federal 3-2 - API #43-037-31120, Sec. 3-T38S-R24E
Cave Canyon Federal 3-3 - API #43-037-31413, Sec. 3-T38S-R24E
Cave Canyon Federal 4-3 - API #43-037-31414, Sec. 4-T38S-R24E
Cave Canyon Federal 4-4 - API #43-037-31539, Sec. 4-T38S-R24E
Cave Canyon Federal 4-5 - API #43-037-31695, Sec. 4-T38S-R24E
Cave Canyon Federal 12-3 - API #43-037-31567, Sec. 3-T38S-R24E
Cave Canyon WSW 1 - API #43-037-99998, Sec. 3-T38S-R24E
Wells Federal 1-4 - API #43-037-31028, Sec. 4-R38S-R24E

18. I hereby certify that the foregoing is true and correct

SIGNED

Van C. Spence

TITLE

Sr. Production Engineer

DATE

8/4/95

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-LEC / GIL
2-LWP 7-PL
3-DTS 8-SJ
4-VLD 9-FLE
5-RJF
6-LWP

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

- ☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 6-23-95)

TO (new operator) GIANT EXPLOR & PROD CO
(address) PO BOX 2810
FARMINGTON NM 87499

phone (505) 326-3325
account no. N 0075

FROM (former operator) DUNCAN ENERGY COMPANY
(address) 1777 S HARRISON ST PH #1
DENVER CO 80210

phone (303) 759-3303
account no. N3370

Well(s) (attach additional page if needed): *WIW
(CAVE CANYON SECONDARY RECOVERY UNIT)

Name: <u>CAVE CANYON 1-33/ISMY</u>	API: <u>43-037-31276</u>	Entity: <u>9775</u>	Sec <u>33</u> Twp <u>37S</u> Rng <u>24E</u>	Lease Type: <u>U40751</u>
*Name: <u>CAVE CANYON 3-1/ISMY</u>	API: <u>43-037-31095</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
Name: <u>CAVE CANYON 3-2/ISMY</u>	API: <u>43-037-31120</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
Name: <u>CAVE CANYON 3-3/ISMY</u>	API: <u>43-037-31413</u>	Entity: <u>9775</u>	Sec <u>3</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
Name: <u>CAVE CANYON FED 4-3/IS</u>	API: <u>43-037-31414</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
Name: <u>CAVE CANYON FED 4-4/IS</u>	API: <u>43-037-31539</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
Name: <u>CAVE CANYON FED 4-5/IS</u>	API: <u>43-037-31695</u>	Entity: <u>9775</u>	Sec <u>4</u> Twp <u>38S</u> Rng <u>24E</u>	Lease Type: <u>U47876</u>
CONT...				

OPERATOR CHANGE DOCUMENTATION

- Le 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Reg. 7-18-95) (Reg. 7-26-95) (Rec'd 8-4-95)
- Le 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Rec'd 7-17-95)
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: ____
- Le 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- Le 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (8-8-95)
- Le 6. Cardex file has been updated for each well listed above. 8-14-95
- Le 7. Well file labels have been updated for each well listed above. 8-14-95
- Le 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (8-8-95)
- Le 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- See 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- N/A See 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- ____ 2. A copy of this form has been placed in the new and former operators' bond files.
- ____ 3. The former operator has requested a release of liability from their bond (yes/no) ____.
Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A See 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- ✓ 1. All attachments to this form have been microfilmed. Date: August 21 1995.

FILING

- ____ 1. Copies of all attachments to this form have been filed in each well file.
- ____ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

950718 Reg. "WIC F5" (Rec'd 7-31-95)

950725 Blm / Moab Appr. cA. 6-23-95.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

Page 2 of 2

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

DIANE G JARAMILLO
GIANT EXPLOR & PROD CO
PO BOX 2810
FARMINGTON NM 87499

UTAH ACCOUNT NUMBER: N0075

REPORT PERIOD (MONTH/YEAR): 8 / 96

AMENDED REPORT ☐ (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
✓ CAVE CANYON 3-2								
4303731120	09775	38S 24E 3	ISMY			u 47876	Cave Cyn Unit	
✓ CAVE CANYON 1-33								
4303731276	09775	37S 24E 33	ISMY			u 40751	"	
✓ CAVE CANYON 3-3								
4303731413	09775	38S 24E 3	ISMY			u 47876	"	
✓ CAVE CANYON FED. 4-3								
4303731414	09775	38S 24E 4	ISMY			"	"	
✓ CAVE CANYON FED. 4-4								
4303731539	09775	38S 24E 4	ISMY			"	"	
✓ CAVE CANYON FEDERAL 12-3								
4303731567	09775	38S 24E 3	ISMY			"	"	
✓ CAVE CANYON FEDERAL 4-5								
4303731695	09775	38S 24E 4	ISMY			"	"	
✓ CAVE CANYON 13-3								
4303731766	09775	38S 24E 3	ISMY			"	"	
GAGE FOSTER #1								
4303731463	10991	37S 23E 32	DSCR			ml 43698		
✓ HATCH POINT #1								
4303731658	11356	29S 21E 14	LDLL			u 61791		
Gothic Mesa 16-11								
43-037-15042	6008	41S 23E 16	DSCR / WIW			1420602243	Gothic Mesa Unit / Nav.	
→ Cave Canyon 3-1								
43-037-31095	9775	38S 24E 3	ISMY / WIW			u 47876	Cave Cyn Unit	
TOTALS								

COMMENTS:

I hereby certify that this report is true and complete to the best of my knowledge.

Name and Signature: _____

Date: _____

Telephone Number: _____

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well:

OIL ☐ GAS ☐ OTHER: WW

2. Name of Operator:

Central Resources, Inc.

3. Address and Telephone Number:

1775 Sherman Street, Suite 2600 Denver, CO 80203 303-830-0100

4. Location of Well:

Footages: 2140' FNL & 200' FWL

QQ, Sec., T., R., M.: SW NW Sec. 3-T38S-R24E

5. Lease Designation and Serial Number:

U-47876

6. If Indian, Allottee or Tribe Name:

NA

7. Unit Agreement Name:

NA

8. Well Name and Number:

Cave Canyon Fed. 3-1

9. API Well Number:

43-037-31095

10. Field and Pool, or Wildcat:

Cave Canyon, Ismay

County: San Juan

State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT

(Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other _____ | |

Approximate date work will start _____

SUBSEQUENT REPORT

(Submit Original Form Only)

- | | |
|---|---|
| <input type="checkbox"/> Abandonment * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Other <u>Change of Operator</u> | |

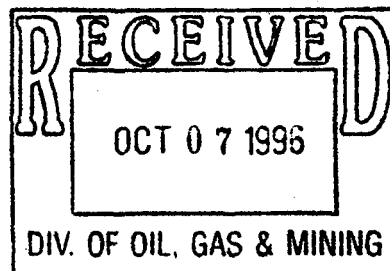
Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Effective 9/1/96 operations of the subject well were transferred from Giant Exploration & Production Company to Central Resources, Inc.



Giant Exploration & Production Company

Name & Signature

Title: Production/Regulatory Manager Date: August 30, 1996

13. Central Resources, Inc.

Name & Signature

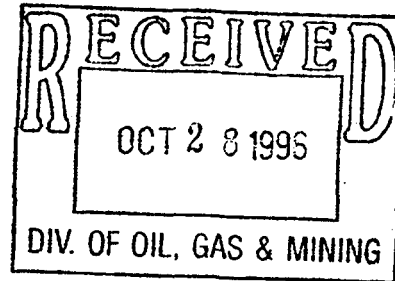
Title: Engineering Technician Date: August 30, 1996

(This space for State use only)

CENTRAL

RESOURCES, INC.

October 23, 1996



Ms. Lesha Cordova
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Monthly Oil & Gas Production Report

Dear Ms. Cordova:

Central Resources, Inc. purchased all assets from Giant Exploration & Production Company effective September 1, 1996.

Central is in the process of acquiring a Utah Account Number. However, to avoid mailing the enclosed Monthly Oil and Gas Production Report late, the account number on the report has been left blank.

If you have any questions regarding this matter, please contact Edna Wageman or myself at (505) 326-3325.

Sincerely,

Diane G. Jaramillo by EW

Diane G. Jaramillo
Office Supervisor

DGJ/

Enclosure

** 9/6/028 not final op. NL935 "Central Res. Inc."
(clg. not finalized yet!)*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other WIW

2. Name of Operator

Central Resources, Inc.

3. Address and Telephone No.

1775 Sherman Street, Suite 2600, Denver, Colorado 80203 (303)830-0100

4. Location of Well (Footage, T, R, M, or Survey Description)

2140' FNL & 200' FWL
SW NW Sec. 3-T38S-R24E

5. Lease Designation and Serial No.

UTU47876

6. If Indian, Allote or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Cave Canyon 3-1

9. API Well No.

43-037-31095

10. Field and Pool, or Exploratory Area

Cave Canyon, Ismay

11. County or Parish, State

San Juan, UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Surface Casing/Cementing
☒ Other: CHANGE OF OPERATOR

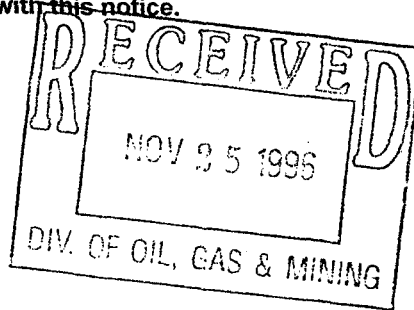
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.

If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markets and zones pertinent to this work.)*

Please be advised that effective September 1, 1996, Central Resources, Inc. assumed operatorship of the referenced well. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Central Resources, Inc. under their statewide bond, BLM Bond No. B06175. They will be responsible for compliance under the lease terms and conditions for that portion of the lease associated with this notice.



CONDITIONS OF APPROVAL ATTACHED

14. I hereby certify that the foregoing is true and correct

Signed:

Shene Martinez

Title: Engineering Technician

Date: November 1, 1996

(This space for Federal or State office use)

/s/ Brad D. Palmer

**Assistant Field Manager,
Resource Management**

Approved by:

Date:

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Central Resources, Inc.
Well No. Cave Canyon 3-1
SWNW Sec. 3, T. 38 S., R. 24 E.
San Juan County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Central Resources, Inc., is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased land.

Bond coverage for this well is provided by BLM Bond UT1053 (Principle - Central Resources, Inc.) as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5

Well name and number: Cave Canyon 3-1Field or Unit name: Cave Canyon API no. 43-037-31095Well location: QQ SNNW section 3 township 38S range 24E county San JuanEffective Date of Transfer: 9/1/96

CURRENT OPERATOR

Transfer approved by:

Name Monte N. SwetnamCompany Giant Exploration & Production CompanySignature Monte N. SwetnamAddress 2200 Bloomfield HighwayTitle Executive Vice PresidentFarmington, NM 87499Date 10/30/96Phone (505) 326-3327

Comments:

NEW OPERATOR

Transfer approved by:

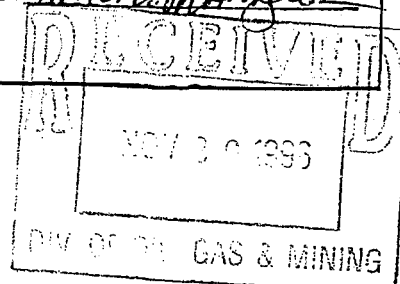
Name Irene MartinezCompany Central Resources, Inc.Signature Irene MartinezAddress 1775 Sherman Street, Suite 2600Title Engineering TechnicianDenver, Colorado 80203Date October 25, 1996Phone (303) 830-0100

Comments:

(State use only)

Transfer approved by [Signature]Title Environ. ManagerApproval Date 12-3-96

*96/1203 Copies mailed both operators
Jec



OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

1-LEC	6-IEE
2-GEN	7-KDR
3-DTS	8-SJ
4-VLD	9-FILE
5-RJF	

- ☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed, effective: 9-1-96

TO: (new operator) CENTRAL RESOURCES INC
 (address) 1775 SHERMAN ST STE 2600
DENVER CO 80203-4313
IRENE MARTINEZ
 Phone: (303)830-0100
 Account no. N6935 (10-25-96)

FROM: (old operator) GIANT EXPLOR & PROD CO
 (address) PO BOX 2810
FARMINGTON NM 87499
DIANE JARAMILLO
 Phone: (505)326-3325
 Account no. N0075

WELL(S) attach additional page if needed:

***CAVE CANYON UNIT**

Name: **SEE ATTACHED**	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____
Name: _____	API: _____	Entity: _____	S _____	T _____	R _____	Lease: _____

OPERATOR CHANGE DOCUMENTATION

- 1 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). (Rec'd 10-7-96)
- 2 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). (Rec'd 10-7-96)
- 3 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is the company registered with the state? (yes/no) ____ If yes, show company file number: #C0193111. (LH 8-2-96)
- 4 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of Federal and Indian well operator changes should ordinarily take place prior to the division's approval, and before the completion of steps 5 through 9 below.
- 5 5. Changes have been entered in the Oil and Gas Information System (3270) for each well listed above. (11-25-96)
- 6 6. Cardex file has been updated for each well listed above. (11-25-96)
- 7 7. Well file labels have been updated for each well listed above. (11-25-96)
- 8 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. (11-25-96)
- 9 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- lec 1. (r649-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been notified through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

- N/A lec 1. (r649-3-1) The NEW operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operator's bond files.
3. The FORMER operator has requested a release of liability from their bond (yes/no) , as of today's date . If yes, division response was made to this request by letter dated .

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

- N/A lec 1. Copies of documents have been sent on to at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.

FILMING

- lec 1. All attachments to this form have been microfilmed. Today's date: 12-30-96.

FILING

1. Copies of all attachments to this form have been filed in each well file.
2. The original of this form, and the original attachments are now being filed in the Operator Change file.

COMMENTS

9/6/25 BLM/Moab Aprv. 11-19-96.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number:

U-47876

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Indian, Allottee or Tribe Name:

N/A

7. Unit Agreement Name:

N/A

8. Well Name and Number:

Cave Canyon Fed. 3-1

9. API Well Number:

43-037-31095

10. Field and Pool, or Wildcat:

Cave Canyon, Ismay

1. Type of Well:

OIL ☐ GAS ☐ OTHER: WIW

2. Name of Operator:

Elm Ridge Resources, Inc.

3. Address and Telephone Number:

312 W. LaPlata Street, Farmington, New Mexico (505) 632-3476 326-7099

4. Location of Well:

Footages: 2140' FNL & 200' FWL

County: San Juan

QQ, Sec., T., R., M.:

SW NW Sec. 3-T38S-R24E

State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT

(Submit in Duplicate)

☐ Abandonment☐ New Construction☐ Casing Repair☐ Pull or Alter Casing☐ Change of Plans☐ Recom☐ Conversion to Injection☐ Shoot or Acidize☐ Fracture Treat☐ Vent or Flare☐ Multiple Completion☐ Water Shut-Off☐ Other

Approximate date work will start

SUBSEQUENT REPORT

(Submit Original Form Only)

☐ Abandonment *☐ New Construction☐ Casing Repair☐ Pull or Alter Casing☐ Change of Plans☐ Shoot or Acidize☐ Conversion to Injection☐ Vent or Flare☐ Fracture Treat☐ Water Shut-Off☒ Other Change of Operator

Date of work completion

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Effective October 1, 2000, operations of the subject well were transferred from Central Resources, Inc. to Elm Ridge Resources, Inc.

RECEIVED

OCT 10 2000

DIVISION OF
OIL, GAS AND MINING

Central Resources, Inc.

Name & Signature

Jane Martinez

Title: Engineering Technician

Date: 09/29/00

13.

Elm Ridge Resources, Inc.

Name & Signature

Darryl Eubly

Title: Operations Manager

Date: 09/29/00

(This space for State use only)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other WIW

2. Name of Operator

Elm Ridge Resources, Inc.

3. Address and Telephone No.

312 W. LaPlata Street, Farmington, New Mexico (505) 326-7099

4. Location of Well (Footage, T, R, M, or Survey Description)

2140' FNL & 200' FWL

SW NW Sec. 3-T38S-R24E

5. Lease Designation and Serial No.

UTU47876

6. If Indian, Allotte or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Cave Canyon 3-1

9. API Well No.

43-037-31095

10. Field and Pool, or Exploratory Area

Cave Canyon, Ismay

11. County or Parish, State

San Juan, UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Surface Casing/Cementing
	<input checked="" type="checkbox"/> Other: CHANGE OF OPERATOR
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.

If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markets and zones pertinent to this work.)*

Please be advised that ~~effective October 1, 2000~~, Elm Ridge Resources, Inc. assumed operatorship of the referenced well. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Elm Ridge Resources, Inc. under their statewide bond, BLM Bond No. ~~305705~~. They will be under the lease terms and conditions for that portion of the lease associated with this notice.

RECEIVED
NOAS FIELD OFFICE
2000 OCT 17 P 2:16
DEPT OF THE INTERIOR
BUREAU OF LAND MGMT

Bond obtained 3/20/01
Change of operator effective 4/1/01
BLM Bond # UT1216

RECEIVED

JUN 11 2001

DIVISION OF
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct

Signed:

Dan Luley

Title: Operations Manager

Date: September 29, 2000

(This space for Federal or State office use)

Approved by:

William Hunter

Title:

Assistant Field Manager,
Division of Resources

Date:

6/6/01

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

cc: udcsm 6/16/01

Elm Ridge Resources, Inc.
Well No. Cave Canyon 3-1
SWNW Sec. 3, T. 38 S., R. 24 E.
Lease UTU47876
San Juan County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Elm Ridge Resources, Inc. is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT1216 (Principal - Elm Ridge Resources, Inc.) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

RECEIVED

JUN 11 2001

**DIVISION OF
OIL, GAS AND MINING**

OPERATOR CHANGE WORKSHEET

ROUTING

1. GLH ✓		4-KAS
2. CDW		5-LP
3. JLT		6-FILE

Enter date after each listed item is completed

X Change of Operator (Well Sold)

Designation of Agent

Operator Name Change (Only)

Merger

The operator of the well(s) listed below has changed, effective: **10-01-2000**

FROM: (Old Operator):
CENTRAL RESOURCES INC
Address: 1775 SHERMAN STREET
DENVER, CO 80203-4313
Phone: 1-(303)-830-0100
Account N6935

TO: (New Operator):
ELM RIDGE RESOURCES INC
Address: P O BOX 198
FARMINGTON, NM 87499
Phone: 1-(505)-632-3476
Account N1440

CA No.

Unit: CAVE CANYON

WELL(S)

NAME	API NO	ENTITY NO	SEC TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
CAVE CANYON 3-1	43-037-31095	9775	03-38S-24E	FEDERAL	WIW	A

OPERATOR CHANGES DOCUMENTATION

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/11/2001
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/11/2001
- The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 11/08/2001
- Is the new operator registered in the State of Utah: YES Business Number: 4830075-1150
- If **NO**, the operator was contacted on: N/A
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: 06/06/2001
- Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
- Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A

9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 11/14/2001

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 11/08/2001
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 01/08/2001
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE BOND VERIFICATION:

1. State well(s) covered by Bond No.: N/A

FEDERAL BOND VERIFICATION:

1. Federal well(s) covered by Bond No.: UT-1216

INDIAN BOND VERIFICATION:

1. Indian well(s) covered by Bond No.: N/A

FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond No: N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A
The Division sent response by letter on: N/A
3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: _____

FILMING:

1. All attachments to this form have been **MICROFILMED** on: _____

FILING:

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on: _____

COMMENTS:

10/OCT/17 '01.. 09:46PM 0956328151

ELM RIDGE RESOURCES

P.1GE 02

UIC FORM 3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Cave Canyon Federal 3 #1	API Number 4303731095
Location of Well	Field or Unit Name Cave Canyon, Tarmay
Footage : 5240 Fm. 5200000	County Garfield
State : UTAH	Lease Designation and Number UTU47876
QQ. Section, Township, Range: 3000000 3000000 3000000	

EFFECTIVE DATE OF TRANSFER: 10/01/00


CURRENT OPERATOR

Company: Central Resources, Inc.
Address: 1775 Sherman Street
City Denver State CO Zip 80203-5313
Phone: 303-830-0100
Comments:

Name: Trace Truitt
Signature: [Signature]
Title: Engineering Tech.
Date: 10/17/01

NEW OPERATOR

Company: Elm Ridge Resources, Inc.
Address: PO Box 188
City Farmington State MT Zip 87499
Phone: 505-632-3476
Comments:

Name: Doug Endley
Signature: 
Title: Operations Manager
Date: 10/18/01

(This space for State use only)

Transfer approved by:

Times

Approval Date: 11/13/01

Comments



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

June 19, 2001

Central Resources Inc.

PO Box 1213

Bloomfield, NM 87413

Re: Pressure Test for Mechanical Integrity, Cave Canyon 3-1 Well, Section 3,
Township 38 South, Range 24 East, San Juan County, Utah

Gentlemen:

The Underground Injection Control Program, which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class, II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least once in every five-year period beginning in October 1982. Please make arrangements and ready the well for testing during the week of July 23, 2001 as outlined below:

1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), as well as personnel to assist in opening valves etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the wells to be tested on this date the tests may be rescheduled.
4. Company personnel should meet DOGM representatives at the field office or other location as negotiated.
5. All bradenhead valves with exception of the tubing on the injection wells must be shut-in 24 hours prior to testing.

Page 2
Central Resources Inc.
June 19, 2001

Please contact me at (801) 538-5336 to arrange a meeting time and place or negotiate a different date, if this one is unacceptable.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dan Jarvis".

Dan Jarvis
UIC Geologist

INJECTION WELL - PRESSURE TEST

Well Name:	<u>Cave Canyon 3-1</u>	API Number:	<u>43-037-31095</u>				
Qtr/Qtr:	<u>SWNW</u>	Section:	<u>3</u>	Township:	<u>38S</u>	Range:	<u>24E</u>
Company Name:	<u>Elm Ridge Resources</u>						
Lease:	State	Fee	Federal	<input checked="" type="checkbox"/>	Indian		
Inspector:	<u>D. James L. Condore</u>			Date:	<u>7/26/01</u>		

Initial Conditions:

Tubing - Rate: _____ Pressure: 0 psiCasing/Tubing Annulus - Pressure: 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>925</u>	<u>0</u>
5	<u>925</u>	<u>0</u>
10	<u>925</u>	<u>0</u>
15	<u>925</u>	<u>0</u>
20	_____	_____
25	_____	_____
30	_____	_____

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: _____ psi

Casing/Tubing Annulus Pressure: 0 psi

COMMENTS: Well passed MIT

Operator Representative

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9.

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: Elm Ridge Exploration Company, LLC <i>N2985</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 12225 Greenville, Suite 950 CITY Dallas STATE TX ZIP 75243		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: COUNTY: STATE: UTAH		8. WELL NAME and NUMBER: See attached Exhibit "A"
PHONE NUMBER: (972) 889-2100		9. API NUMBER:
		10. FIELD AND POOL, OR WILDCAT:

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input checked="" type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective February 18, 2005, Elm Ridge Resources, Inc. transferred all responsibility of Operations for the wells described on the attached Exhibit "A" to Elm Ridge Exploration Company, LLC.

Current Operator:

Name Elm Ridge Resources, Inc. N1440 Title Land Manager

Signature Cathleen Colly Date December 1, 2005

New Operator:

NAME (PLEASE PRINT) Elm Ridge Exploration Company, LLC TITLE Land Manager

SIGNATURE Cathleen Colly DATE December 1, 2005

(This space for State use only)

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DEC 05 2005

Exhibit "A"
Operator Change
Effective February 18, 2005

Old Operator:	Elm Ridge Resources, Inc.									
New Operator:	Elm Ridge Exploration Company, LLC									
Lease Designation / Serial Number	Indian, Allottee or Tribe Name	Unit or CA Agreement	Well Name and Number	API Number	Type Well	Field and Pool or Wildcat	Location of Well Footages at Surface	1/41/4 Section Township, Range	County	State
14-20-603-239A	Navajo	Gothic Mesa Unit	Gothic Mesa 7-41	43-037-15032	Oil Well	Gothic Mesa	625' FNL, 710' FEL	NENE-7-41S-23E	San Juan	UT
14-20-603-239A	Navajo	Gothic Mesa Unit	Gothic Mesa 6-34	43-037-15034	Oil Well	Gothic Mesa	660' FSL, 1980' FEL	SWSE-6-41S-23E	San Juan	UT
14-20-603-240	Navajo	Gothic Mesa Unit	Gothic Mesa 17-31	43-037-15040	Oil Well	Gothic Mesa	820' FNL, 2140' FEL	NWNE-17-41S-23E	San Juan	UT
UTU-47876	N/A	N/A	Wells Federal 1-4	43-037-31028	Oil Well	Cave Canyon	500' FNL, 500' FEL	NENE-4-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 3-2	43-037-31120	Oil Well	Cave Canyon	1925' FSL, 1925' FWL	NESW-3-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 1-33	43-037-31276	Oil Well	Cave Canyon	535' FSL, 2025' FEL	SWSE-33-37S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 3-3	43-037-31413	Oil Well	Cave Canyon	2635' FNL, 1390' FWL	SENW-3-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon Federal 4-3	43-037-31414	Oil Well	Cave Canyon	1310' FNL, 200' FEL	NENE-4-38S-24E	San Juan	UT
ST of UT ML-43698	N/A	N/A	Gage Foster 1	43-037-31463	Oil Well	Road Canyon	2180' FNL, 1780' FWL	SENW-32-37S-23E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 4-4	43-037-31539	Oil Well	Cave Canyon	1150' FNL, 1070' FEL	NENE-4-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon Federal 12-3	43-037-31567	Oil Well	Cave Canyon	1610' FNL, 1300' FWL	SWNW-3-38S-24E	San Juan	UT
14-20-603-239	Navajo	Gothic Mesa Unit	Gothic Mesa 6-43	43-037-31643	Oil Well	Gothic Mesa	1900' FSL, 500' FEL	NESE-6-41S-23E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon Federal 4-5	43-037-31695	Oil Well	Cave Canyon	50' FNL, 1800' FEL	NWNE-4-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 13-3	43-037-31766	Oil Well	Cave Canyon	2045' FSL, 1180' FWL	NWSW-3-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	WSW. No. 1	43-037-31820	Water Source	Cave Canyon	1800' FSL, 1845' FWL	NESW-3-38S-24E	San Juan	UT
UTU-47876	N/A	N/A	Cave Canyon 3-1	43-037-31095	Water Injection	Cave Canyon	2140' FNL, 200' FWL	SWNW-3-38S-24E	San Juan	UT
14-20-603-243	Navajo	Gothic Mesa Unit	Gothic Mesa 16-11	43-037-15042	Water Disposal	Gothic Mesa	500' FNL, 500' FWL	NWNW-16-41S-23E	San Juan	UT

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Cave Canyon 3-1		API Number 4303731095
Location of Well		Field or Unit Name Cave Canyon
Footage : 2140'FNL 200'FWL	County : San Juan	Lease Designation and Number UTU 47876
QQ, Section, Township, Range: SWNW 3 38S 24E	State : UTAH	

EFFECTIVE DATE OF TRANSFER: 2/18/2005

CURRENT OPERATOR

Company: Elm Ridge Resources, Inc. N1440
Address: 12225 Greenville Ave, Suite 950
city Dallas state TX zip 75243
Phone: (972) 889-2100
Comments: Pursuant to merger and name change.

Name: Cathleen Colby
Signature: Cathleen Colby
Title: Land Manager
Date: 12/1/2005

NEW OPERATOR

Company: Elm Ridge Exploration Company, LLC N2985
Address: 12225 Greenville Ave, Suite 950
city Dallas state TX zip 75243
Phone: _____
Comments: Pursuant to merger and name change.

Name: Cathleen Colby
Signature: Cathleen Colby
Title: Land Manager
Date: 12/1/2005

(This space for State use only)

Transfer approved by: [Signature]
Title: UIC Geologist

Approval Date: 12/7/05

Comments:

RECEIVED

DEC 05 2005

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: not yet

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: not yet

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 12/7/2005

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 12/8/2005
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 12/8/2005
3. Bond information entered in RBDMS on: 12/8/2005
4. Fee/State wells attached to bond in RBDMS on: 12/8/2005
5. Injection Projects to new operator in RBDMS on: 12/8/2005
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UT00126

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: 886936C

FEE & STATE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 1116000107
2. The **FORMER** operator has requested a release of liability from their bond on: n/a
The Division sent response by letter on:

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Water Injection Well</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU47876
2. NAME OF OPERATOR: Elm Ridge Exploration CO LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: CAVE CANYON
3. ADDRESS OF OPERATOR: PO BOX 156 CITY <u>Bloomfield</u> STATE <u>NM</u> ZIP <u>87413</u>		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>2140' FNL X 200' FWL</u>		8. WELL NAME and NUMBER: CAVE CANYON 3-1
PHONE NUMBER: (505) 632-3476		9. API NUMBER: 4303731095
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>3 38S 24E</u>		10. FIELD AND POOL, OR WILDCAT: Cave Canyon Ismay
COUNTY: San Juan County		STATE: UTAH

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input checked="" type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input checked="" type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Integrity</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

After running a BP and packer the 5-1/2" casing was found to have hole from 3400' to 3811'. Circulation was established from that interval to surface. Dye was mixed in the water and pumper up the annulus to determine annular volume for cement volume. It was determined that the open hole volume below the 8-5/8" casing was 85 bbls (477 cuft). 773 sks of cement was pumped this volume would insure cement to rise well within the 8-5/8" casing. Drilled out retainer and cement, ran tbg. and pkr, pressure tested annulus witnessed by Bart Kettle. Returned well to injection, pressured up. Rigged back up on well, pumped 2000 gal of 15% HCl acid. Placed well back on injection pumped 160 bbls at 6.5 BPM at 0 psi. Tested annulus again and charted. Summary of work to prevent this type of failure: 1) Repaired and tested wellhead. 2) Replaced injection tubing with new 2-7/8" lined tbg. 3) Cemented annulus that was previously left open. 4) Rebuilt coated pkr. 5) Acidized formation. Injection on 03/09/09 was 1.3 BPM at 650 psi tbg. 0 psi casing.

NAME (PLEASE PRINT) Amy Mackey

TITLE Administrative Manager

SIGNATURE Amy Mackey

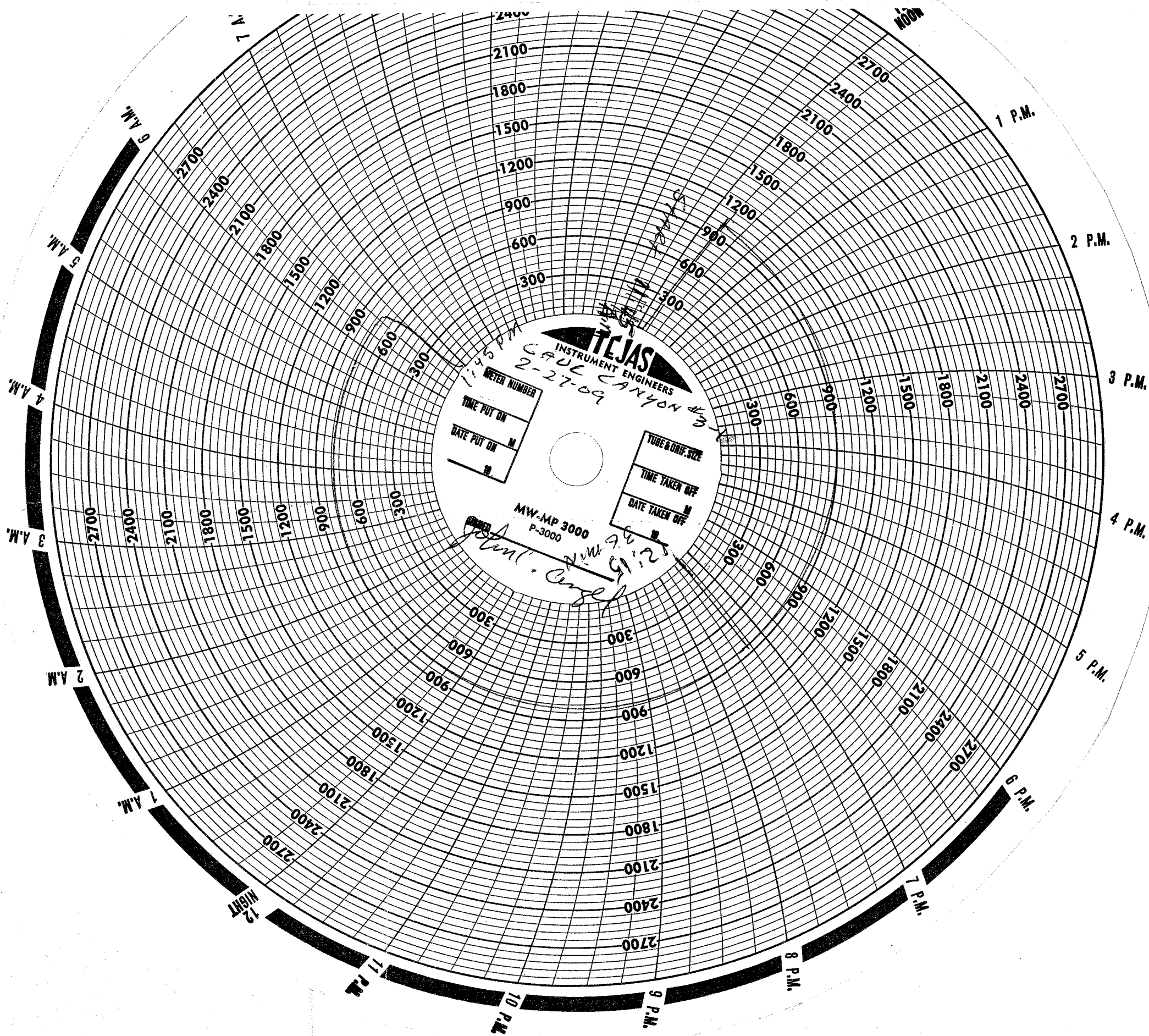
DATE 3/9/2009

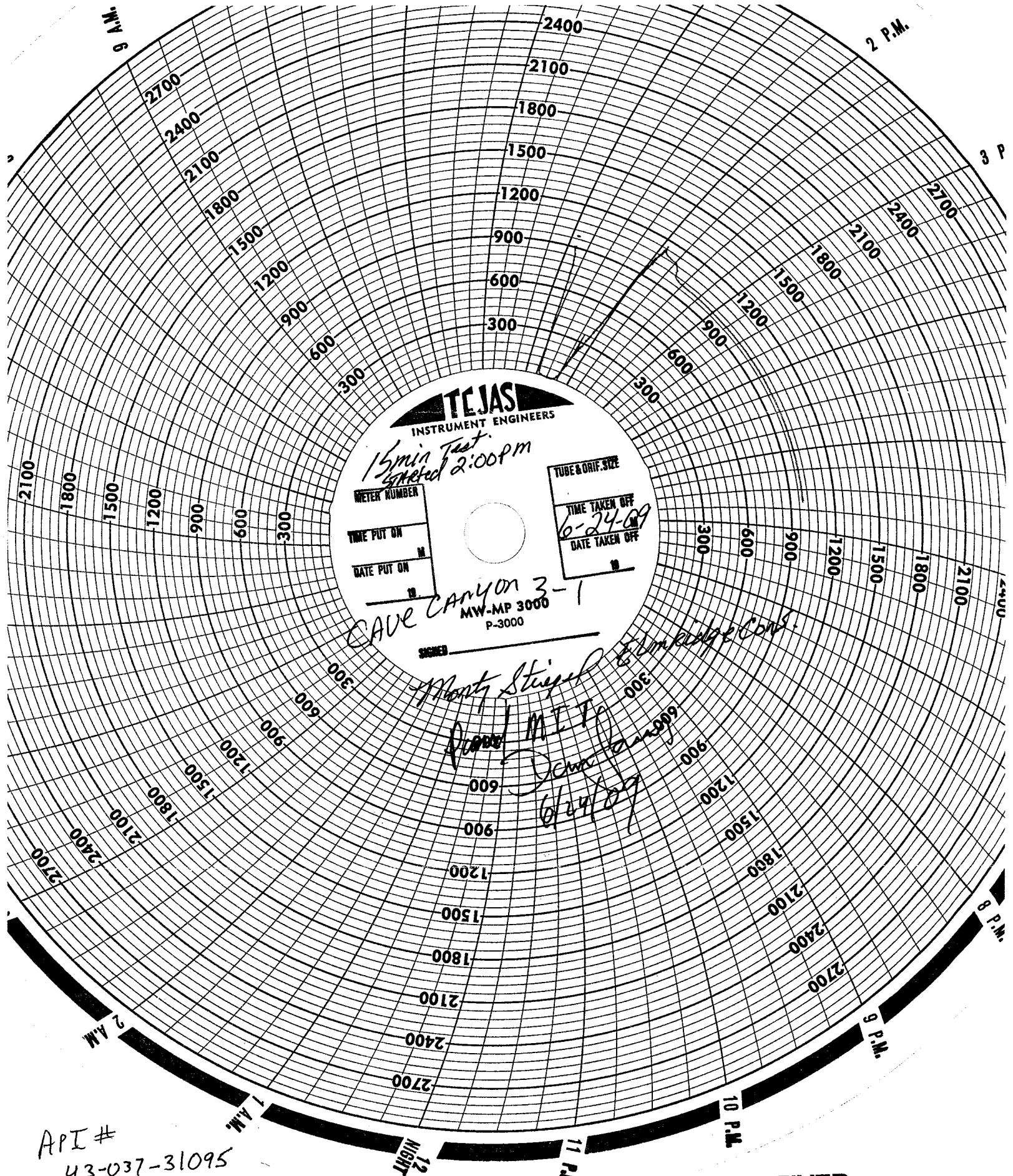
(This space for State use only)

RECEIVED

MAY 21 2009

DIV. OF OIL, GAS & MINING





API #
43-037-31095

6/24/09 → Passed MIT.

38S 2AE 3 *[Signature]*

RECEIVED

JUN 30, 2009

DRILLING, GAS & MINING



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 25, 2014

Elm Ridge Exploration Company
12225 Greenville Ave Ste 950
Dallas, TX 75243

SUBJECT: Pressure Test for Mechanical Integrity, Cave Canyon 3-1 (API# 43-037-31095)
Well, San Juan County, Utah:

To Whom It May Concern:

The Underground Injection Control Program, which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five-year period beginning October 1982. The following wells require a current test:

Cave Canyon 3-1

43-037-31095

3

38S

24E

Please make arrangements and ready wells for testing during the week of July 28th, 2014, as outlined below:

1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), along with personnel to assist in opening valves, etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the well(s) to be tested on this date the test(s) may be rescheduled.
4. Company personnel should meet a DOGM representative(s) at the field office or other location as negotiated.



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June 25, 2014
Elm Ridge Exploration Company

5. All bradenhead valves with exception of the tubing on the injection well(s) must be shut-in 24 hours prior to testing.

Please contact me at (435) 820-0862 to arrange a meeting time and place or to negotiate a different date, if the date(s) specified is unacceptable.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bart Kettle', with a stylized, sweeping flourish extending to the right.

Bart Kettle
Environmental Scientist

bk/dj/js

cc: Dan Jarvis, Operations Manager
Well File